THE

MEDICAL BULLETIN:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

VOL. IX. PHILADELPHIA, OCTOBER, 1887. No. 10.

A CLINICAL LECTURE.

EXCISION OF THE CUBOID; AMPUTATION OF THE LEG FOR FRACTURE.

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DELIVERED IN THE PENNSYLVANIA HOSPITAL,

[Reported for THE BULLETIN by J. W. SUTTON, M.D.]

GENTLEMEN: I present to you an interesting case of marked valgus and equinus of the left foot, and an excessive varus of the right. The valgus with all the force I can make will not assume a normal position, because the scaphoid is in a measure dislocated outward and acts like a wedge. All the toes are very strongly flexed. In the other foot we have exactly the opposite condition. This deformity is acquired, and is the result of infantile paralysis.

In the equino-varus we have here the peronei muscles more or less feeble or paralyzed, the tibialus anticus and posticus and the tendo-achilles inactive, contraction drawing the sole of the foot inwards and the heel upwards, while on the left side we have the anterior muscles paralyzed and the peronei more powerful, which gives an outward displacement of the foot. In this lad's case, then, we have two varieties of deformities, on the left side valgus and equinus and on the right varus and equinus. The varus is so excessive and the tarsus so dense that under antisepsis, I propose, in order to lessen the difficulty in treatment, not only to divide the faulty tendons, but to excise the cuboid bone. The incision should start from the head of the metatarsal bone of the little toe, for on a line with that bone we find the groove of the cuboid. In these cases, where there has been intra-uterine paralysis, and the child after birth appears well developed, it is the adipose tissue which prevents the early discovery of the atrophy. When the child advances in years infantile fat decreases, and then the atrophy is discovered; then the difference in the development of the muscles is found by measuring the circumference of the two limbs as well as their length. Now, in this case, there has been a greater amount of paralysis and atrophy in the right limb than in the left.

The operation consists in making a curved incision over the outer side of the tarsus, turning back the flap and thus exposing the cuboid articulation. The knife has gone directly through the division between the head of the metatarsal bone of the little toe and the cuboid, as the first step in detaching this bone from its connections. You must remember in these operations, that in all these cases of club foot, where there is so great deformity, the position of the part is somewhat changed. I find the bone is firmly wedged in, and requires some force to remove it. I also divide the plantar fascia, which you notice is very tense. In dividing the posterior tibial tendons you make puncture over the inner edge of the tibia above the ankle, working the foot until you feel the tendons on the stretch, and then enter the knife at a right angle to the bone, and turning it you feel the tendon on the edge. I will also divide the tendo-achilles and the flexor of the great toe.

A drain of cat-gut is inserted into the bottom of the wound of excision, and should emerge from the wound on the inner side. Having

introduced a large number of gut sutures to close the wound, the sutures are covered by the protective which is to keep the iodoform from the cut surfaces, and also to keep the drain moist, for if the ends of the drain become dry the outlet is choked and there may be no drainage. This wound is now dressed by the antiseptic method in the usual way with Lister gauze, wet with bichloride solution, and will not be disturbed for some days. In some of these cases the tarsus has been found so dense, and the difficulty of removing the cuboid so great, that it led to the operation of Calby, which is removing with a saw a wedge-shaped piece.

The next case is one where there has been a compound comminuted fracture of the leg, and in which an attempt has been made to save the limb. Many of these cases of compound comminuted fracture do well, but in this case there is now so much necrosis and non-union that amputation is indicated. In making a Teale operation, it is necessary to first select your point of operation, and then measure the circumference of the limb at that point for the size of your flaps, for you make the long flap just half the circumference of the limb at the point of division of bones, and the short flap is made just one-fourth the length of the long one; thus, suppose at the point selected for operation the limb measured twelve inches in circumference, you would then make your long flap just half of this, or six inches long and broad, and the short flap one-quarter of this length, or one and a half inches.

In this operation you generally try to get your arteries in the long flap. It makes no difference whether you get the long flap in front or behind. Amputations at the juncture of the middle with the lower third do better for artificial limbs than at the upper third. In this case we have necrosis of the fracture at the juncture of the lower third, so that the amputation must be a little higher up. There has been very little that is eventful in this man's temperature since he has suffered from the injury. This operation will, of course, be done under antisepsis, and the wound closed and left for some days without disturbance. In all these cases where you close up the stump you must watch the temperature, for if there is any rise in the temperature there is probably something wrong going on in the stump, and it must be opened. Now, where we propose to operate in this case, the limb is ten and a half inches in circumference, and one-half of that is five and a quarter in length, and we must make our short flap one-fourth as long,—that is one and a quarter inches. We use here for tying arteries chromicized cat-gut ligatures, and cut short as they will be absorbed.

ORIGINAL COMMUNICATIONS.

THE THERAPEUTICAL STATUS OF THE VEGETABLE PEPSIN PAPOID.

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WE have in the materia medica albumen, fibrine, tallow, sulphur, musk, and charcoal, described as "vegetable." Is there any reason why there should not be such a drug as vegetable pepsin? The vegetable tallow which is produced from the seeds of the stillingia sebifera is almost pure stearine, and makes as good candles as ever were moulded by chandlers. The volatile oil of the malva moschata and the mimulus moschatus is not only vegetable musk in odor, but is in no respect inferior to the secretion in the muschus moschiferus in antispasmodic properties. The yellow sporules constituting the powder or pollen of the lycopodium, and known in Europe as vegetable sulphur, is an excellent application to a gangrenous wound, as is true sulphur. As for the carbo ligni, it may not equal carbo animalis as a decolorizer, but in medicine, mechanics, and the arts, it is the charcoal that needs not the descriptive name. While we describe albumen ordinarily as the albumen ovi, yet there is no doubt but that the vegetable albumen is identical with it in all respects. The same identity exists as undoubtedly between animal fibrine and gluten, or vegetable fibrine; and in some respects we know vegetable albumen and fibrine better than we do the animal articles. The same may be said of the vegetable wax and jellies. The charcoal is fucus vesiculosus, called vegetable ethiops; has the same reputation as a deobstruent that was first enjoyed by the now discarded ethiops mineral. Indeed, the latter has been displaced by the former altogether, and probably not one physician in ten would think of the black sulphuret of mercury upon reference to the drug ethiops. So, why not vegetable pepsin?

The question is to those who ridicule the idea, in the same manner as the old lady, who said of vegetable oysters, "Goodness gracious, whoever heard of an oyster with leaves tew it, and without a shell!"

Among drugs, new and notable, papoid or vegetable pepsin has come forward with many promises. In response, the exclamation comes in the old lady's tone, "The idea of attributing to a vegetable product the properties of a product never other than animal!" Aside from the six or eight illustrative substances known as "vegetable," we gain an additional evidence against the reasoning from the cheese-maker. While rennet is used uniformly for curding, this phenomena is also produced, in practice, by the action of such substances as decoctions of thistletops, butterwort, artichoke flowers, and sundry other plants. Of these plants the artichoke has not failed to extend its reputation, the housewife in Southern Europe commonly setting out a dish of boiled artichoke flowers to offset the effects of cabbage upon the digestion, whenever that vegetable comes to the table.

If we accept of Bartholow's definition of pepsin, as a substance possessing the property of digesting the nitrogenous constituents of the food, and converting them into peptones, it may well be questioned as to whether we need restrict these physiological properties to the well known ferment obtained from the mucous membrane of the pig's stomach. The vegetable matter that the pig eats has something to do with the pepsin-producing properties of its stomach. Writes a manufacturer in answer to our question as to whether he buys all of the stomachs which he can obtain indiscriminately:—

"We prefer those coming from dairymen who feed their hogs on milk, with the weeds from the garden occasionally thrown into the pen. . . . However, my men decline none, except those from brewery pens, where refuse malt grains are fed, and those from the yards of abbatoirs, where, instead of milk and corn, the food is meat scraps and blood."

"I think," adds this gentlemen, "that one might get pepsin substitutes out of certain plants or their fruit."

True, and the "certain plant or its fruit" is the carica papaia.

This is a tropical fruit, growing in the tropical countries of America, and in the south temperate zones. On the Caribbean coast it goes by the name of the "mammy apple," "papa," or "monkey-cap."

It grows wild, indigenous to the soil, taking its chances in any locality in which its seed may fall. Whether under the equatorial heats or on table lands, it seems to flourish equally well. It is a tree, exhibiting wonderful development, reaching to a height of thirty to forty feet, or otherwise as large as our apple trees. As is the case with our apple, the crop of each tree varies, but the average produce seems to be about one hundred and fifty fruit to a tree. They are of the size of a cocoanut, but a little more inclined to be round in shape. When ripe the color is a greenish-yellow, with a yellowish-white pulpy interior. The taste is aptly described as a sourish-sweet, and is very much relished, the fruit being extremely popular for eating purposes. As the tree is so common the quantity of the fruit in the local markets is large, and the price in season is usually a penny per apple. It is eaten raw, the skin being pared off, like that on an apple.

The Indians seemed to have recognized that this fruit facilitates digestion, for the Europeans obtained from the natives the knowledge of it. A German engineer was the first to come to a more than local appreciation of the fruit. He had been engaged in the building of a railroad in the Valley of the Platte, and in making the full acquaintance of the climate he discovered in himself an attack of dyspepsia. It became intolerable and finally, he announced to his half-breed assistant that he should have to go down to Asuncion to obtain a remedy. The native spoke of a fruit, the eating of which procured immunity from the disease, and the engineer made mention of this to the Asuncion pharmacist whom he consulted. The latter "knew all about it." The fruit was the little dark-green cherimolia, pulpy, full of seeds, and, of course, the very thing, because from having a taste like rennet, it had the name of *pomme de reinette*. The German tarried a fortnight, and ate cherimolias. His assistant coming in found him at his task, protested something about "what's in a name," and substituted mammons for the cherimolias. The result was the same that others have remarked —a relief of the dyspepsia. This was, perhaps, but one of many like experiences, but it led up to an analysis, and the outcome is a

powder known as vegetable pepsin or papoid, brought out in Germany, and recently introduced in the United States by Messrs. Johnson & Johnson. Is it a true substitute?

Professor Finckler, of the University of Boon, says that it will convert five times as much albumen into peptone as the best pepsin; that it stimulates the peptic glands, and promotes the flow of gastric juice thereby; that it also has an intestinal action; and that, unlike pepsin, it acts in the presence of an alkali or an antiseptic. In our own experience we have found that, while a grain of Jensen's Crystal Pepsin will dissolve 3300 grains of albumen, the same quantity of papoid procured the solution of at least 10,000 grains of bulk. One grain of crystal pepsin effected the solution of eight grains of finely chopped meat in twelve hours, in two drachms of water, at a temperature of 100° Fahr.; while one grain of papoid procured a similar solution of thirty-seven grains in the same time. Further evidence in favor of a true substitution need hardly be asked of the laboratory.

The therapy proves the same. We are accustomed to hold that it will do anything that the crystal pepsin will, and this it is quite possible to verify. Wherever there is a deficiency of the pepsin principle it will supply it, be the manifestation dyspepsia, gastric disease, or the apeptic state in cancer, diabetes, phthisis, and fevers. For children, in indigestion disorders, it is preferable to pepsin. In the vomiting of pregnancy, gastric catarrh, infantile diarrhœa, gastric ulcer, and anæmia, invariable success will attend its use.

WAKING NUMBNESS.

BY JOHN AULDE, M.D.

UNDER the above caption has recently been described "A curious neurosis, characterized by numbness on waking, either general or confined to the distribution of the ulnar nerves," and, judging from the attention it has received, bids fair to become one of the diseases of our modern nosology. It is a condition of affairs which may be accounted for in several ways: 1st. To the more careful investigation of the present day may be traced this discovery in pathology. 2d. It may be simply an old and well-recognized disease described under a new name. 3d. It may not in itself be more than a symptom of a diseased condition in the economy, and any attempt to treat it as an entity will be simply a waste of valuable time. However, before entering into a discussion of these questions, it will be appropriate to select the points from the cases thus far reported, when the reader will be better prepared to judge them on their merits.

Dr. Andrew H. Smith (American Journal Medical Science, April, 1887) gives an account of four cases of this character which have come under his observation during the last six years, which will be briefly described as follows: The first was a professional man, aged forty-three, who experienced this sensation on awakening, while motion, sensation, and the tactile sense were unaffected; but gradually both hands became affected, then the arms, next the shoulders, then the upper part of the thorax, then the tip of the tongue, and, finally, in the course of two or three years, the lips were included, and there it stopped. This patient appeared to be in perfect health. The second case was a patient who, up to five years previously, had been in good health, but at that time on awakening one morning experienced partial paralysis in right arm and leg, together with some thickness of speech. The latter condition soon disappeared, but the paresis continued, and two years later was followed by a similar attack affecting the left side and left half of face. It is unnecessary to follow this case further, except to say that the patient complains of a sensation of numbness or tingling in the fingers of both hands on awaking out of sleep, and, like the first case related, the sensation passes off in one or two minutes. The third case was that of a lady aged twenty-five, who had lately recovered from malarial dysentery. She complained of a sensation of numbness in the right arm, which occurred only on her awakening in the morning, the condition often lasting for an hour or two. It will be sufficient to add, in regard to this case, that antiperiodic doses of quinine failed to remove the difficulty, but that quinine, iron, and strychnine, given as a tonic, "with a change of climate and absolute rest, ultimately gave her relief, and the peculiar numbness disappeared with her general improvement." Dr. Smith's fourth case is that of a gentleman aged fifty-three, now suffering from partial paraplegia, dependent upon chronic myelitis. This patient complains of a sensation of general numbness on first awaking in the morning, but after free muscular movements it

gradually passes off. On the supposition that the numbness might be due to an impeded cerebral circulation, the patient was advised to sleep with the head very high, but this afforded relief only to the more prominent symptoms. It should be mentioned in this connection that the urine in this case contained large quantities of oxalate of lime, and was highly acid.

In referring to the general character of these cases, Dr. Smith suggests that the cause is probably central, since the effect is usually symmetrical, and that no local treatment is likely to be of service. As to constitutional treatment, in the only uncomplicated case, all remedies failed. No treatment was carried out efficiently, but ergot, digitalis, strychnine, and aconite gave no apparent result. In the other cases the diseased condition gave the indications for treatment, and "in proportion as the treatment of the underlying condition was successful the numbness disappeared."

Dr. S. Weir Mitchell, in his lectures on "Diseases of the Nervous System," speaking of this class of cases, says: "The disorder may be mere tingling or actual loss, or rather lessening of tactile sensation; but in any case it rapidly fades away, or yields to a little friction."

Dr. C. L. Dodge (Medical News, July 30, 1887) adds two cases to those already stated. They are as follows: A lady aged thirty-eight applied to his preceptor twenty years ago, on account of "a peculiar numbness and tingling sensation in the left arm, extending to the tips of the little finger and the ulnar side of the ring-finger." She was advised rest, friction, and tonics, and she improved, but she has been subject to these night attacks ever since, though free from them for weeks at a time. The second case reported by Dr. Dodge is a son of the patient first mentioned, aged thirty-three, actively engaged in professional work, and for the past twelve years has experienced these peculiar sensations *occasionally* on waking out of a sound sleep. This sensation is felt on one side sometimes, then on the other, and only occurs once in the same night, and motion, sensation, and the tactile sense are entirely unaffected. It has occurred but once during the daytime, and the patient admits that it may appear more frequently when he indulges in sexual excesses.

The evidence is quite sufficient to make out a case of disordered sensation, but it is not sufficient to afford a foundation for naming a new disease, and a recapitulation of several cases of this nature which have come under my observation will go far towards determining the facts in the case.

CASE I.—Several years ago I formed the acquaintance of a gentleman, in the vigor of manhood, who told me of this peculiar sensation he had frequently experienced when awaking in the morning, or, in fact, when awaking out of a sleep at any hour of the day. There was numbness and tingling which lasted for a minute or less, but after that time everything seemed to adjust itself. For a considerable time—several years—this condition persisted, and, although somewhat alarmed at first, later on it was regarded as only a natural sensation, so that nothing was done for it, and in the course of time this condition has wholly disappeared. The patient at the time was in the enjoyment of excellent health, and that is his condition at the present writing, although he has never done anything for the purpose of overcoming the trouble.

CASE II.—In the issue of THE MEDICAL BULLETIN for March, 1883, I reported a case which may properly come within this category, but the heading adopted, "Was it Chronic Endarteritis?" is scarcely in conformity with the modern nosology. The patient suffered from numbness and tingling in the fingers, so that she was unable to fasten her clothing in the morning, and it would be afternoon before she was able to pick up a pin or a needle. Fortunately she is still living, and although she has received no other treatment since, except for an ordinary cold, she has remained permanently well. She has passed through the hands of several physicians before coming under my observation, and had been a sufferer for some ten years. I may mention that the treatment consisted in the administration of the iodide and the carbonate of ammonium in combination.

CASE III.—About four years ago I was consulted by a widow lady, aged forty-seven, who believed that she was threatened with paralysis, having suffered for some time from this peculiar sensation of numbness and tingling. For months she had required assistance to dress in the morning, but for the most part she had no further trouble. Some weeks previous to calling on me, while away from home, she had a sense of numbness come over one side of the body, and felt rather uncomfortable, but this

soon passed off, and left no indications of damage having been done, but it caused great fear that paralysis was imminent, and she accordingly sought medical attention. It should be stated that this was not the first attack of the kind, but it was the most pronounced and extended attack which had occurred during several years preceding, and was quite sufficient to cause alarm. The same treatment was adopted in this case which had succeeded so well in Case II, and that, together with suitable tonic treatment, was sufficient to relieve the trouble for many months, but it did not entirely cure the disease. The patient has been for the most free from these disagreeable sensations, and only occasionally takes the medicine; how often I cannot say, as I have not seen her for the past year.

CASE IV.—During the past winter I attended a lady, married, aged forty, who was at the time suffering from an aggravated attack of quinsy, caused, as nearly all of these cases are, by a disordered condition of the alimentary tract, to which has been superadded exposure to cold. When convalescent, I was about to dismiss her, with some parting admonitions in regard to the necessity for giving attention to the cause of her repeated attacks of this nature, but she requested me to advise her concerning an unpleasant sensation which she had experienced for several years past. There was numbness, tingling, and a pricking sensation in the fingers of both hands, which made its appearance at almost any time in the day, sometimes at night when she awoke, and occasionally in the morning. She appeared to be in good health, somewhat given to embonpoint but not corpulent, but there was a sallowness about the complexion indicating inactivity of the liver, while the emunctories of the skin were certainly in a dormant condition. I advised baths and friction, together with the remedy which I have just mentioned, and in the course of ten days the trouble was one of the things of the past. Not deeming it necessary to have the medicine longer continued, I directed that the other part of the treatment should be faithfully carried out, but I am sorry to say these instructions, probably because they did not include the use of medicine, were not complied with, and as a matter of course the disease has developed a tendency to return, though far less distinct in its manifestations than previously.

Remarks.—It was my intention to make some suggestions in relation to the probable causes which are undoubtedly at the bottom of all of these cases, but it seems now, after going over the ground, and pointing out the special conditions underlying these conditions, that we shall not have far to look for a solution of the difficulty. It is evident that we have imperfect or faulty action in some of the more important tissues or structures of the economy, and a better knowledge of physiology will eventually enable us to account for all of the abnormal sensations. When appearing coincident with old age, we must expect to find some diseased condition of the smaller bloodvessels, or possibly the whole vascular system may be in sympathy, while in younger persons it will be well to investigate the physiological activity of the various organs and tissues.

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THE RELATION BETWEEN FLEXION OF THE UTERUS, ABORTIONS AND STERILITY.

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IT is certainly a fact that abortions are particularly liable to occur in cases where the uterus is the subject of marked flexion; the flexion being, as clinical histories of cases are carefully examined, evidently very frequently responsible for the occurrence of the premature expulsion of the uterine contents.

The associations of flexions of the uterus with liability to abortion early attracted my notice, and I have had many opportunities of procuring the unmistakable evidence on this point. Those who attach little importance to the presence of uterine flexions, regarding them as natural, normal, and non-pathological, can be referred to facts and phenomena observed in connections with abortions, for evidence of the great disturbing influences exercised by these distortions of the uterus, where chronic and confirmed, or the function of pregnancy, which is frequently brought to a premature termination, because the distorted uterus is not capable of proper and easy expansion as the pregnancy advances.

In the next place must be insisted on, the influence of chronic flexions in producing sterility, the shape of the uterus interfering with

impregnation by preventing the process of insemination.

The two symptoms—abortion and sterility—are closely related to each other, as will be evident on studying the history of cases as they come before us. Thus, a young married woman, A—, shortly after her marriage has an abortion. It is found that the uterus is affected with a chronic flexion. The patient remains sterile. Another patient, B—, has been married for some years, and seeks a remedy for sterility, when it is found that she is the subject of a chronic flexion. Another patient, C—, has had one child, soon after which it was discovered that she was the subject of a chronic flexion, and she seeks advice, because some four years have elapsed since the birth of the child, and there has been no further pregnancy. This last patient, C—, is treated for the flexion, and she quickly becomes again pregnant. Following up the history of this case, this second pregnancy ends in an abortion, after the occurrence of which, the uterus is found to have resumed its flexed shape, and, perhaps, the patient being now more carefully and continuously treated, a third pregnancy occurs, and a second child is born at full time. Another variation of the case C—, is that in which two or three, or more, abortions have occurred since the birth of the first child, and, on giving the patient a suitable pessary to wear, the next pregnancy has been a successful one as regards its result.

Numerously observed facts, such as those mentioned in the foregoing paragraph, all telling the same story, and giving evidence of the disturbing influences of chronic uterine flexions, have come before me, in the course of my experience.

In the last edition of my work on "Diseases of Women," I have called attention to statistics bearing on the subject here discussed. There, in 499 married women who were suffering from symptoms which were attributed, by me, to presence of chronic uterine flexion, 142, or 25.4 per cent, were absolutely sterile; in 29, or 5 per cent. of them, abortions only had occurred. Further, it was found that 89, or 17.8 per cent., had had both one or more children and abortions, and that 239, or 47.8 per cent., had had children without occurrence of abortion. In 72 cases the patient had had only one child.

The above numbers apply to what may be termed primary sterility. There is also what may be termed "secondary" sterility; that is to say, cases where the patient, having had one or more children, becomes sterile, and there is no further pregnancy. Thus, of the above-mentioned cases there were 72 instances in which the patient had had only one child, the interval which had elapsed since being from one to twenty-two years (anteflexions), and from one to twenty-four years (retroflexions). The average duration of the secondary sterility had been for anteflexion 6.4 years, and for retroflexion 8 years. Taking, again, cases in which the patient had had two children, there were 50 cases. Duration of secondary sterility was from 1 to 16 years (anteflexions), and 1 to 14 years (retroflexions). The average duration of secondary sterility was: anteflexions, 4.4 years, and retroflexions, 5.1 years.

The cases represented by the statistics just given were those of patients observed in private practice. Some of them presented themselves for treatment on account of the sterility, but the large majority complaining of various uterine discomforts, and detailing various symptoms of which sterility was noted whenever it presented itself. Primary sterility may be due to various causes other than distortion and displacement of the uterus; it may come from general causes, from defects or weaknesses in the husband, from chronic gonorrhœal affection of the uterus, or Fallopian tubes or ovaries, from adhesions in the pelvic peritoneum, and numerous other abnormal conditions. Secondary sterility may arise also from the same causes as primary sterility, but another cause must here be added, viz., laceration of the cervix, which may both cause secondary sterility, and may also give rise to abortion. Still, after making our allowance for the influence of various other conditions in interfering with fecundation, my opinion is, that in by far the greater number of instances of sterility, the potent interfering power is a condition of the cervical canal which prevents insemination, and which is virtually an obstruction generally situated high up in the cervical canal, at or below the internal os. The obstruction appears to arise from the compression and coaptation of the walls of the canal, produced by the distorted shape of the uterus. For this result to be produced the uterus must be in a state of well-marked flexion, and the tissues of the cervix must be in an indurated condition. The quasi-

erection of the cervix which accompanies intercourse, probably, as Coste showed some years ago, produces a considerable opening out of the cervical canal, which is favorable to insemination, but when the uterine cervix is hypertrophied, hard, and resistant from a long-standing flexion, this increase in the patency of the canal is not so likely to occur at the necessary moment. The cervical canal in these cases is often practically closed by the pressure of the anterior on the posterior wall of the canal, hence a virtual obstruction.

One of the chief arguments for the truth of this view of the important obstructive influence of uterine flexions is the observation as to the curative effect, so far as sterility is concerned, of straightening out the flexion. Another is the frequency with which flexions are found associated with liability to abortion and observation of the effect of treating the flexion, in preventing further occurrence of this accident in cases where abortions, sometimes three or four or more in number, have been successively noted. It is not uncommon to meet with cases where the patient has had no child, but a succession of abortions, and when in such a case treated by simple straightening of the uterus the patient becomes a mother, this is a sufficiently striking proof of the interfering power of the flexion. When the treatment fails, as it sometimes does at first, to give the necessary full relief, it is instructive to notice the decided improvement effected. The next pregnancy lasting longer than the previous ones shows that good has been effected, and encouragement is offered for prosecuting further treatment on the same general lines.

LONDON, May, 1887.

*RECTAL ALIMENTATION AND MEDICATION IN DISEASES OF THE SKIN.**

BY JOHN V. SHOEMAKER, A.M., M.D.,
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THE power of the rectal mucous membrane to absorb substances placed in contact with it is but little inferior to that of any other portion of the gastro-intestinal canal.

Moderate quantities of milk, eggs, gruel, blood, beef-tea, and all the nutritious broths are absorbed by the rectum almost as quickly as by the stomach. Ether and other volatile agents produce their characteristic effects immediately after their introduction into the rectum. Solutions of morphia, atropia, aconitia, quinia, and hyoscyamine are taken up as rapidly, and strychnine and nicotine more rapidly by it than by the stomach.

As a general rule all substances in solution are speedily absorbed by the rectum, unless they are so irritative in character as to produce muscular contraction, which will only cease upon their expulsion. Soluble non-irritating substances in powder, or in the form of suppositories, are taken up more slowly, but eventually as certainly as if administered in the usual manner, unless expelled along with the feces before absorption is complete. The absorbent properties of the rectum are frequently availed of in the treatment of gastric irritability, ulcer of the stomach, carcinoma of various portions of the alimentary tract. By giving the stomach absolute rest, and nourishing and medicating the patient by the rectum, the duration of acute attacks is lessened, life in many cases saved, and, in others, prolonged for months.

The same methods which yield such gratifying results in these diseases may also be employed with decided benefit in many cutaneous affections.

In epithelioma of the lips and tongue, after excision has been performed, patients are usually fed through a rubber tube, but notwithstanding the greatest care on the part of the patient and nurse, the movement of the muscles in swallowing conveys more or less irritation to the edges of the wound, and may, in some cases, stimulate the morbid process to renewed activity. It would be much better in such cases to place the oral muscles at complete rest, and nourish the patient by the rectum until the wound is completely healed. The same method should be adopted for several days after cauterizing or scraping lupus spots on the lips or in the mouth.

In stubborn cases of infantile eczema—in which the little patient, while retaining all the food it takes and presenting no symptoms of gastro-intestinal disorder, yet does not increase in weight—immediate improvement will often follow the administration of one ounce of milk by enema four times a day. In these cases, which may be termed examples of infantile apepsia, the skin affection is clearly the result of insufficient nutrition.

Obstinate cases of pemphigus and impetigo

* Read before the Section on Dermatology and Syphilis, Ninth International Medical Congress.

in children of all ages are frequently due to the same cause, and are promptly relieved as soon as supplementary rectal nutrition compensates for deficient gastric assimilation.

There is an intractable form of recurrent acne observed in young girls and delicate boys, which, on inquiry, will be found to be closely associated with stomachic debility. When their appetite is good and digestion perfect the eruption disappears, but, after a time, without apparent cause, their appetite lessens, the sight or smell of food produces a feeling of nausea, and, if they force themselves to eat as much as formerly, they vomit it soon afterwards. They become pallid and weak, and the eruption, usually consisting of from one to a dozen papules, reappears. Investigation fails to disclose the portion of the digestive system at fault. The tongue remains clean, the bowels are normal, and all the bodily functions, except those of eating and assimilating, are performed as usual. The routine treatment for these patients consists of iron, strychnine, the mineral acids, the various bitter tonics, and usually terminates in success in from two to six months. Many of them could be cured in from two to four weeks by combining the rectal administration of milk, malt extract, and beef-juice, with the internal medication previously referred to.

A general rule which may be safely followed in the treatment of all diseases, whether of the skin or any other organ or portion of the body, is, whenever the system manifests evidences of insufficient nutrition, supplement stomachic assimilation by the administration of nutritious enemata.

The only exception to this rule is when the rectum is unable, either from irritability or disease, to retain the enema long enough for absorption to occur.

Care should be taken in the preparation of nutritious enemas to insure the irretention. If too large they will overdistend the rectum, and produce vigorous contractions, ending in expulsion. If too cold or too hot, the same result is certain to occur. They should be lukewarm, and not exceed four ounces for an adult, and one ounce and a half for a child. They ought not to be given oftener than once every four hours, or they may induce an irritable condition of the mucous membrane. The advice of some authors to empty the rectum of fecal matter by an ordinary injection before giving an enema intended for absorption is ludicrous. Every surgeon knows that the rectum, as was pointed out by O'Byrne forty years ago, is normally an empty pouch until defecation begins.

Rectal Medication.—In cutaneous diseases suppositories are the most convenient form of medicating the system by the rectum. They are absorbed more slowly than solutions, but their ease, cleanliness, and safety of administration more than compensate for their slightly retarded action. They are especially valuable in the treatment of those phenomenal children who have an invincible repugnance for medicine in any form, and who manage to spit it out, or vomit it up, notwithstanding all sorts of threats and caresses. Medicated suppositories will, in these cases, relieve the parents as well as the patient, and make the doctor's life more bearable. The main indication for rectal medication, in cutaneous as well as other diseases, is inability of the stomach to receive or retain the medicine needed to restore health. As this is the only criterion, it is obvious that it would be impossible to enumerate the affections of the skin in which rectal medication would be valuable, and those in which it would be useless. Every case must be judged in accordance with its own requirements.

If the symptoms present are such as are usually antagonized or removed by the systemic action of a certain drug, and the gastric mucous membrane is so disordered, that that drug is immediately rejected by vomiting, our duty is to endeavor to procure its absorption in another manner, rather than to discard it and search for another remedy.

In many cases of syphiloderma mercury will not be tolerated by the stomach, and the patient's habits or business affairs are such that inunctions, hypodermatic injections, or fumigations cannot be employed. In these cases I have repeatedly witnessed the disappearance of the eruption, and the recovery of the patient, from the employment twice a day of suppositories containing one-half grain of calomel, or one-quarter grain of the protiodide of mercury. Infantile syphilis may be effectually treated in the same way, reducing the quantity of calomel to the one-twelfth of a grain, and the protiodide to the one-twentieth or the one-hundredth part of a grain. The bichloride, or any of the other preparations of mercury may be substituted in appropriate doses.

Scrofuloderma is almost invariably benefited by cod-liver oil, but patients are occasionally met with who are unable to take it in any form. In two mild cases of this disease, under my care recently, in which this idiosyncrasy was extreme, I effected complete cures by the employment of rectal enemas of one ounce of cod-liver oil every night, continued for five weeks, in one case, and in the other for two months.

Erythema multiforme and erythema nodosum when due to malaria, are usually accompanied by so much gastric irritability that even water is vomited as soon as it reaches the stomach. Twenty grains of quinine, made into a suppository and inserted in the rectum will relieve all the symptoms in a few hours.

Urticaria nodosum, a somewhat similar affection, will promptly yield to the same treatment. Urticaria simplex, due to the presence of fermentative or irritating material in the gastro-intestinal canal, can be more speedily relieved by the rectal injection of an ounce of castor-oil and an ounce of glycerine than by any other method.

Erythema intertrigo, when produced by the irritation of diarrhœal discharges can frequently be removed almost immediately by the use of a single suppository containing a small quantity of opium combined with from five to twenty grains of a vegetable astringent like geranium, or hamamelis.

Pruritus ani is often due to an œdematous condition of the tissues around the anus. In this event antipruritic lotions and ointments can be of only temporary utility, and occasionally aggravate, instead of alleviating the patient's sufferings. A suppository containing ten grains of powdered geranium, or ten grains of quercus alba will dissipate the œdema, and banish the itching. Pruritus vulvæ and general pruritus are occasionally traceable to disorder of the anal nerves, and can then be almost magically relieved by the employment of suppositories composed of opium one-half grain and extract of belladonna one-half grain, or opium one-half grain and chloral five grains; quinine ten grains and extract of cannabis indica one-half grain, is also useful. Arsenic and antimony are of incalculable benefit in many cases of psoriasis, but they frequently disorder the stomach so much that their administration is suspended before the eruption is removed, and some less potent but less irritating remedies substituted, My experience has convinced me that to discontinue their use under such circumstances is an error. They can be given with advantage in the form of suppositories. Care must be taken, however, to have them evenly divided throughout the mass, and to employ, at least, one-twentieth of a grain of arsenious acid or arsenite of sodium in each suppository, one to be used from one to three times a day. Iodide of potassium is of great service in many cases of subacute and chronic eczema, but its peculiar recurrent taste, and the additional eruption which is occasionally developed by it, limit its employment. If it be given in small doses in the form of suppositories these unpleasant drawbacks will rarely be observed.

There are other cases of obstinate eczema in which rectal enemata of cod-liver oil will be more successful than any other remedy. Ichthyosis may be signally palliated by the same method.

Many other cutaneous affections might be mentioned in which rectal medication will prove valuable, but I prefer to limit my remarks to those in which I have realized its value by practical experience.

A CASE OF PROGRESSIVE UNILATERAL FACIAL ATROPHY.

BY J. W. LEIP, M.D.,
KREAMER, PA.

MR. W. L. S., æt. 29, a farm hand by occupation; married; and of good moral character, has undoubted progressive unilateral facial atrophy. At the age of twelve he sustained a fall, but his parents cannot remember on which side he struck. No phenomenon developed until twelve months after the receipt of the injury, when fibrillary twitchings of the left upper lip were manifest. Hemiatrophy appeared very gradually, and did not completely develop until eight years afterwards, progressing steadily through the periods of adolescence. Since that time there has been no evident change in the disease, certainly not during the past three years, while the patient has been under my care. At present the discoloration is very insignificant, resembling ash-gray, but decidedly glossy and greasy looking.

He cannot give characteristics of any former discolorations. The creases and contours of the left side are totally obliterated. The malar bone is principally involved, and of it the zygoma is least affected. From the latter to

the nose, and from the lip to the eye, the principally atrophic area, the skin is firmly adherent to the bones. The mouth is drawn upward and outward. It can be perfectly, though tortuously, closed. The left eye cannot be closed to prevent the admission of some rays of light, otherwise voluntary motion is perfect. He can bite nearly as hard on the left side as on the right. But so long as the patient can remember he always masticated his food on the healthy side. The alveolar process on the left upper jaw is lower and narrower than that on the right. The blood-vessels, contrary to a large number of the reported cases of long-standing, are almost completely atrophied. Why the atrophic area from the root of the nose to the middle of the eyebrow, where the existence of vessels admits of easy demonstration, is quite susceptible to cold, I cannot account, unless due to diminished nervous influence. The bridge of the nose is decidedly depressed, the left nasal eminence obliterated. Neither the lower jaw or any of its superincumbent structures are involved.

Pain never existed during any period of the history of the case, except occasional slight supra-orbital neuralgia. Although numbness is at times experienced, there is never a stinging or itching sensation. No diminution of the general tactile sensibility of the skin is determinable. Perspiration is diminished on the affected side, but there is nowhere complete anhydrosis. On the affected side hearing is normal, on the other below normal. This phenomenon is contrary to that of any previously reported case, and probably a complication. Smell and taste are intact, but the tongue is very materially atrophied, so much so that it seemingly causes the tip of the organ to point to the affected side. Perhaps the most startling phenomena is the exophthalmos. The least irritation produces congestion of the conjunctiva, as well as increased lachrymation. Although there was no ophthalmoscopic examination made, there is no reason to suspect visual derangement other than stated above. No change whatever can be perceived anywhere in the hair, yet the patient, viewed from his left, would seem to be about fifty years old. The man never underwent constitutional treatment for the hemiatrophy. During the most progressing period of the disease local remedies were unavailingly resorted to. Three years ago I treated him for chronic malarial intoxication with enlarged spleen, my efforts being attended with the very best success. Otherwise his general health has always been good.

MALARIA NO POSITIVE POISON, BUT A NEGATIVELY POISONOUS CONDITION.

BY C. A. F. LINDORME, PH.D., M.D.

THE text-books state, as to malaria, that "of the existence of such a poison there can be no doubt."* But this, I hold, instead of an axiom, is rather, as the French call it, a *facon de parler*, a turn of speech which is made use of in all cases when it is necessary to silence a doubt, the occasion for which is particularly pressing. It would be strange, indeed, if, by speculative pathology, we should establish the existence of a body of which chemistry is perfectly ignorant. Chemical science is far from being loath to tolerate in atonic hypothesis the liberal exercise of synthetic as well as analytic boldness. But no chemist has as yet dared to conclude, from any experiment or combination of thought based thereon, the existence of a substance called "malaria;" and medical literature even, by the shyness with which its more exact branches dwell upon it, testify to the problematic character of this diagnostic entity.

Among the pathological facts connected with malaria, the most prominent one is the intermittence of the ailment which is attributed to it. But this is the very point which speaks against the existence of a positively poisonous substance. If a specific poison could be assumed there would be nothing to support the claim that it acts in a way altogether different from other poisons, be they vegetable, mineral or bacteriological ones, which have a climax of action, and, subsequently, either death or recovery, or, perhaps, a continuous chronic ailment. It is a rather bold logic to contend, without any bodily footing for such an opinion, that there is a specific poison which takes its turns in being poisonous, leaving things intermittently in *statu quo ante*.

The text-books, although peremptory about the existence of the poison, malaria, nevertheless admit the doubtfulness of its nature, and they are very indistinct in their etiology. While they state that organic changes occur

* Roberts's Theory and Practice, i. 248.

mostly in the liver and spleen, they leave it an open question whether the pretended poison is chiefly inhaled by the lungs, taken up by the stomach, or possibly by the skin! . . .

It would be rather punctilious in the poison, malaria, indeed, if the inlet selected for the perpetration of its mischievous tricks in the body were by exclusion of the lungs, the stomach, and the skin! . . .

The assertion that the cause of the so-called malarial diseases may be found in emanations from disintegrating organic matter, vegetative, or, what is worse, animal, is largely supported by pathological observation and therapeutical experience. It seems to exclude all skepticism to its general authenticity, and in attempting to substantiate the hypothesis which is put forward in the heading of this article, we need hesitate the less to take it as our starting point, as it is precisely this fact which speaks in favor of our hypothesis, that malaria is not a positive specific poison, but a negatively poisonous condition.

The substance of chemical notoriety, which is prominent in miasmatic emanations, is methane, $C H_4$, or marsh-gas. This is, strictly speaking, though, no poison; neither is it a dietetic substance. An emanation which is positively poisonous is carbonic oxide, C O. But this occurs in very minute quantities, to which unconditionally we are hardly justified in tracing pathological complications. The particular circumstances, however, under which, as chemistry teaches, miasmatic emanations occur, substantiate the deleterious influence of carbonic oxide, and may be of marsh-gas, or some other less known secondary substances. These circumstances are the very ones which our text-books describe as obtaining in malarial districts, swamps, and alluvial bottom lands as its prototypes. Pathology, or at least diagnosis, contented itself with the simple statement—chemical investigation laid bare the cause of the said condition—it is a comparative absence of oxygen which leads to putrid fermentation, and later to the formation of the noxious compounds.* It is not this circumstance in itself which refers to this pathological point. The carbonic oxide is in a too trifling quantity, the marsh-gas too inoffensive for respiration to start from their absolute influence our etiology of malaria. The fact mentioned is more an agricultural than a biological one. But the further atmospherical condition linked to it is what speaks in favor of our hypothesis.

As one of the most necessary conditions of the operating of the presumptive poison, malaria, the text-books state the stirring of the ground, in turning up the subsoil in the early cultivation of land, digging canals, building railways, and so forth. Now, then, it is a chemical fact that carbon and hydrogen, the principal elementary constituents of miasmatic emanations, have such an affinity for oxygen, and *vice versa*, as in case of the stirring of the soil, to alter materially the even balance in the atmosphere of the hygienic proportion of its component gases. In consequence of that, there will ensue a deficiency of oxygen, which, absolutely trifling though it be, by giving room to the atonicity of the carbonic oxide, and may be even the marsh-gas will realize its relative importance, and set up the peculiar pathological condition which the text-books describe as malarial poisoning. This explains, among other pertinent facts, the observation made and referred to in the text-books, that (1) a higher stratum of air is comparatively free from malaria; (2) in the more advanced stage of cultivation the malarial influence ceases. It is closest to the ground where the absorption of oxygen by the carbon and hydrogen set free is overwhelming; and, on the other hand, the progress of oxidation by the culture of the land must put a stop to the formation of either C O or $C H_4$, the unhealthy, putrid oxidation, is transformed into the vivifying aroma of ripening grain.

The carbonic oxide poisoning in malaria, is, as a matter of course, a chronic one. But its condition corresponds with those of acute cases, inasmuch as in these an excess of free oxygen renders the poison innocuous, so that it is more the absence of oxygen than the presence of carbonic oxide, which must be called the cause of the disease. And the difference between the chronic malarial poisoning and an acute poisoning by, *e.g.*, the emanation from a coal-fire or gas-pipe, is sufficiently explained by the difference in the acting quantity, which in acute cases may be very considerable, and in cases of malaria in a given space of time, analytically, hardly perceptible.

The pathological lesions caused correspond with this difference in the effectiveness of the

* Samuel W. Johnson, M.A., Prof. of Anal. and Agric. Chem. in the Sheff. Sc. School of Yale College.

poisonous influence. In acute cases the deprivation of oxygen is so considerable that it is in the lungs already, where the mischief is being perpetrated; the pathological lesion in acute cases of deprivation of oxygen is almost a mechanical one,—a mere choking. In the chronic case of malarial poisoning the pathological lesion is one of protracted influence, and the organs exposed to it are naturally those which constitutionally, or by way of their organic function, resent most a deficiency of oxygen. These organs are the liver, and, above all, the spleen.

The intermittent character of the malarial disease, which the assumption of a specific poison leaves altogether unexplained, yields readily to demonstrative etiology, if looked at from the point of view preferred by our theory. There is in the spleen a "functional intermittent turgescence," which, "so clearly related to the ingestion of food, and connected with the manufacture of white corpuscles and destruction of red corpuscles of the blood,"* points as forcibly to the constitutional craving of the spleen for an excess of oxygen, as to a deficiency of this indispensable ingredient in the case of morbid enlargement, especially the so-called ague-cake in prolonged breakbone fever.

This periodic turgescence explains also the action of quinine, its often surprisingly prompt effect, and more frequent failing in the long run. What quinine causes is contraction of the spleen. Its action there is like that of an astringent to the stomach, administered to cure a diarrhœa, and if somehow or other nature is sufficiently strong, or the conditions under which the case of malaria occurs sufficiently favorable to supply ulterior healing influences, independent of medical interference, the doses of quinine given may "do it," while in so-called pernicious cases no doses of quinine, short of killing ones, will, by their mere mechanical influence upon the spleen, stop the fever, let alone restore the spleen to healthy organic function.

The avidity with which oxygen is taken up by the soil is shown by experiments of Joussingault and Lewy, according to which a sandy subsoil of forest, fourteen inches deep, contained per acre fourteen cubic feet of carbonic acid, while a sandy soil, ten days after manuring and three days of rain, contained eleven hundred and forty-four cubic feet, and a vegetable mould compost in the same proportion seven hundred and seventy-two cubic feet. The air of the atmosphere, on the other hand, measuring to the height of fourteen inches over one acre, contained only fourteen feet of carbonic acid.*

Now, then, when at the rate of speedy clearings, as in case of proposed tillage use to be undertaken, the oxygen of the air is suddenly given access to a virgin soil that is teeming with oxidizable matter, is it not obvious that the oxygen, forced outward by its affinity, will rush into the turned-up carbon, and the air in its immediate neighborhood, viz., in the lower strata of the atmosphere, be deprived of the gaseous equipoise which constitutes the base of what we call hygienic surroundings, or residential conditions of health?

All particular circumstances connected with the malarial poisoning in these, is in agreement with this theory. When it is said that marshy districts, when constantly overflowed with water, do not develop the poison malaria, and that sudden abundance of water by heavy rains stop its influence; this cannot be explained by assuming a specific substance, "malaria." Such an explanation has been tried. It has been said "because the water absorbs the poison."† But this, held together with the statement that malaria is very apt to occur "along the banks of tropical rivers," ‡ is rather a queer statement. If the water of a pool absorbs the pretended poison, why does the water of a running stream not do it too? On the other hand, when we bear in mind that complete submergence in water puts a stop to a contact of the vegetable matter, which it covers up with the oxygen of the air, the natural consequence is that the latter is restored to the hygienic proportions of its constituents, and thereby deprived of its poisonous character. Even if carbonic oxide continued to be present, it could, on account of its trifling quantity, not work in an excess of oxygen.

Again, our text books say that the poison malaria is not formed if the atmosphere is dry, while malarial complaints "are particularly liable to occur after long-continued dry and hot weather, followed by warm rains." § This can not be satisfactorily explained by the assumption of a specific poison. It is, at least,

* Ct. id., p. 289.

* Johnson, l. c., p. 219.
† Roberts, l. c., p. 246.
‡ Ibid.
§ Ibid.

somewhat specious to teach that the poison, which in case of water, can not get out of the ground, can, in case of drought, not get out either. By the oxygen theory, on the other hand, it is readily explained, for it is a chemically notorious fact that the effect of oxygen on vegetable matter is conditioned by the presence of warmth and water. A rapid oxygenation, especially, will not take place without it.* Protracted drought leaves, therefore, the gaseous proportion of the atmosphere undisturbed. Artificial heat, it is said, destroys malaria. This would indicate a very frail constitution of the latter as a specific poison, scarcely harmonizing with its ulterior persistency. But our theory notes this circumstance as a matter of course. Artificial heat is in its physical effect equal to protracted drought, it dries up, and thereby puts a stop to the oxygenation.

"Certain trees are said to exert an especially protective influence, particularly the eucalyptus globulus." Roberts, who mentions this adds, "but this is more than doubtful," † and, from the standpoint of a specific poison, malaria, it could with difficulty only be made plausible, from the standpoint of the oxygen theory, however, the protective influence of eucalyptus globulus is very easily explained. This tree has a very rich foliage, and it exhales, consequently, a greater amount of oxygen gas than other trees, and, as it is oxygen about which malarial districts are in distress, eucalyptus globulus is one of the most welcome trees of cultivation. Moreover, it thrives in low, warm situations, probably on account of its greediness for carbonic acid, $C\ O_2$. This corresponds with the observation that trees in large numbers afford protection, for with them, collectively, the same circumstance of a dense foliage obtains, and it is stated at the same time, that trees in large numbers seem sometimes to be injurious, this is probably due to secondary circumstances favoring a too great accumulation of carbonic acid by leaf-mould, etc.

Again, it is said that "morning and evening dews augment the danger from malaria materially,"‡ and as reason is given "probably from condensation of the poison." But this explanation savors somewhat of an exaggerated sense of idiopathic pathological independence, for in physical science it is simply preposterous to assume that a poison be condensed by mixing it with water. Even if a condensation were to take place in a similar way, as dew is a condensation of vapor, the alleged reason could not be that of an exacerbation of the topical condition, because in that case the air would become purified, the poison not intensified. On the other hand, an explanation by the oxygen theory is all but forcible. An exhalation of oxygen by the plants never takes place in absence of solar light,* consequently the disadvantages resulting in a malarial district from overabundance of oxidizable matter work at night more than in the daytime. And if the morning and evening hours prove most dangerous, it must be taken into consideration that they are in all diseases the more momentous periods of the day, and this from causes which lie outside of our present topic.

The malaria specific poison theory does not attempt to explain why in winter the toxic effect of malaria is so much less. The oxygen theory explains that readily, too. In the first instance, it is the decrease of decay in consequence of the reduced temperature; but a special cause must be found in the circumstance "that atmospheric ozone is most abundant in winter." † A deficiency of oxygen is accordingly acted against in a twofold manner.

Last, not least, it is stated that overfeeding, especially meat diet and intemperance, predispose to malaria. This does not agree either with the specific poison-theory, alcohol being a favorite remedy in a number of poison cases, opium, snake-bites, etc.; but it agrees perfectly with the oxygen theory, for the more in a human body ingesta of nitrogen (meat) and carbon (alcohol), the more its systemic circulation requires oxygenation, the more readily it is poisoned by a deficiency of oxygen, and made liable to splenic and hepatic disorders. These, in their turn, lead to accessory ailments, anæmia, etc., in a succession which in no way could be explained by the specific poison theory, but which bears out all the more the hypothesis propounded in this article.

There is one more test which the latter, in order to satisfy all scientific requirements—a theory—must be able to stand: this is the test of therapeutics. I know that it is rather difficult to apply. There is as yet very little that is objective in therapeutics. Oxygen is a remedy, the value of which depends greatly on its

* Johnson, l. c., pp. 137–138. † Loc. cit.
‡ Roberts', l. c., 247.

* Johnson, l. c. p. 44. † Ibid.

administration. Its curative effect is not in the dosage, but in the persistency of its application in hygienic treatment, and in this those will fail whose minds are too much imbued yet with the specific poison supposition. But practice will in this, as in all, correct itself. The number of those who are dissatisfied with the old method is rapidly increasing. May our exposition serve to induce them to apply the test of a reformed treatment.

A SELECTED ARTICLE.

MISTLETOE: ITS PHYSIOLOGICAL ACTION AND THERAPEUTIC APPLICATIONS.

BY R. L. PAYNE, M.D.,
LEXINGTON, N. C.

IN the year 1851, Dr. Turnipseed, of South Carolina, called attention to the ecbolic action of a decoction of mistletoe, but little attention was paid to the declaration. In the year 1878, renewed interest in the remedy was excited by an article written by Dr. Long (Louisville Medical News), in which the author speaks highly of the oxytocic virtues of mistletoe, claiming it to be far superior to ergot:—

"1st. Because it acts with more certainty and promptness.

"2d. That instead of producing a continuous or tonic contraction, as does ergot, it stimulates the uterus to contractions that are natural, with regular intervals of rest. Consequently, it can be used in any stage of labor, and in primiparæ where ergot is inadmissible.

"3d. It can always be procured fresh; does not deteriorate by keeping, and is easily prepared."

Cases have also been reported by European authorities, in which children, after eating of the berries, were seized with vomiting, great thirst, tenesmus, bloody and mucous stools, and in one instance collapse and death. Further than the gastro-enteric irritation, which the symptoms in these cases indicate, nothing was published throwing any light upon the physiological action of mistletoe, until, in the North Carolina Medical Journal (May, 1881), the writer published an extended series of experiments upon cold and warm-blooded animals, from the results of which the following general summary of the physiological action of the drug was deduced, viz: "Mistletoe is an irritant of the gastro-intestinal mucous membrane. We also conclude that it exerts, in cold blooded animals, an action on the heart, similar to digitalis, slowing its action by increasing the length of its diastole, at the same time increasing the length of its systole. In warm-blooded animals, its action on the heart is more like that of belladonna, its force not only being increased, but its rate of impulse also, and—contradictory as it may seem—it must be that in frogs the heart is slowed by increase of its inhibiting control, and strengthened by stimulation of its vaso-motor ganglia; while in warm-blooded animals the increase in strength and rate of the pulse is due not only to stimulation of the vaso-motor cardiac ganglia, but also to a paralyzing action on the pneumogastric terminal filaments. It must also be noted that in too large doses, or if its action is too long-continued, mistletoe, by overstimulation of the cardiac motor ganglia, exhausts their irritability and paralysis results. The action of mistletoe on the pupil is also evidence of its stimulant action on the sympathetic nerves; and further it is seen that in both cold- and warm-blooded animals, mistletoe exerts a paralyzing action upon the spinal cord and its nerves, both of sensation and motion, but the action upon the heart and pupil indicate a stimulant effect upon the ganglionic nerves. Whether this paralysis depends upon a specific action on the cord, or whether it be due to a diminished supply of blood, the result of the stimulation of the vaso-motor nerves and consequent contraction of the arterioles, cannot well be determined, but the latter hypothesis I am inclined to adopt.

"Mistletoe destroys the reflex functions of the spinal cord and lessens the electro-motor contractility of muscles."

As a result, then, of this determination of physiological action, and knowing that the uterus, like all unstriped muscles, is almost entirely controlled by the ganglionic nerves, it is easy to understand the alleged oxytocic virtues of mistletoe; and since the publication of my paper above referred to, a number of trustworthy observers have testified to me of its efficiency. Indeed, I am prepared to indorse not only all that Drs. Long, Todd, Lane, and others claim for it, in this connection, but I would further add, that in those cases of post-partum hemorrhage, in which the loss of blood has been extreme and the nervous shock so severe that we dare not give ergot, lest paralysis

of the heart result, mistletoe, from its stimulant action of the heart, may be given with greater safety and with even more confidence as to the relief of the flooding, than ergot.

After an extended experience with mistletoe, in cases of the retained placenta after abortion, I am fully persuaded that it will be found a most efficient remedy. Further, from its stimulation of the vaso-motor nerves and consequent contraction of the arterioles, mistletoe will be found to do good service in epistaxis, hæmoptysis, menorrhagia, metrorrhagia, and, indeed, all passive hemorrhages. That its action on the heart indicates its influence in all diseases of this organ, characterized by weak action and low arterial tension, I have been able to demonstrate in practice, since I claimed for the remedy theoretical virtues in my former paper; and in The Practitioner (November, 1881), will be found a note on viscum album, by Dr. Roswell Park, of Glasgow, who, referring to my paper, confirms my observations in this connection. Dr. Park states that, "whatever the exact pathological condition might be, incompetency and tumultuousness, and distressing cardiac action were the immediate symptoms calling for treatment in those that present themselves. For this I prescribed half drachm doses of the tincture every four hours with the best results; all the patients returning with the above symptoms ameliorated." He further states that the drug is one of no mean "physiological power," and "an excellent substitute for digitalis."

In concluding this hurried sketch, I trust I may be permitted to present a few clinical cases illustrative of the value of the remedy in some of the above-named conditions:—

Case I.—Mrs. E— called me to attend her in her third confinement. She had called me several times when suffering with false pains, consequently I did not hurry; and when I arrived I felt convinced that true labor pains had not set in; indeed, I thought she might be several days from term. She, however, would not hear of my leaving, and, after careful consideration, I determined to give mistletoe a trial. The pelvis was very capacious, the vagina was larger and well lubricated with mucus, and though the os was not at all dilated, the cervix uteri was soft and cushiony to the touch. At the time of giving the first dose of mistletoe, she had been having pains for fifteen hours, and the os uteri was not in the least affected.

3.30 P. M. I gave fluid extract of mistletoe, one drachm. In fifteen minutes she began to have strong pains, and in forty minutes the os was as large as a silver quarter. I now gave another drachm of the fluid extract. Her pains increased in frequency till 4.30 o'clock; the intervals of rest were so short as to be scarcely perceptible, and from that time her pains were so severe as to excite my alarm lest an evil result should follow my meddling. At 9.40, P.M., she was delivered of a girl; the womb contracted well, and she had a good getting up.

Case II.—My father and partner was called to a case of abortion, at the end of the third month, to deliver a retained placenta. His best endeavors failed to obtain the afterbirth. Ergot was then ordered and administered for three consecutive days without result; there was an offensive discharge from the vagina and septicæmia seemed imminent. Dr. Payne then bethought himself of mistletoe, and had a strong decoction prepared from the green leaves, and about half a teacupful administered at a single dose. In a short time violent uterine effort occurred and the placenta was expelled at a single pain. The woman complained that she felt as if she would be "turned wrong side out." Recovery followed with no untoward symptom.

Case III.—Mrs. T—, being examined per yaginam, the cervix was found in a cancerous condition on the anterior surface, and the woman, who was in the third month of pregnancy was in the act of aborting. The fœtus was soon delivered, but then all uterine action ceased and the after-birth was retained.

After waiting some time in vain for a recurrence of action, a half-teacupful of a decoction of mistletoe was administered. In a short time pains again set in and the placenta was promptly expelled.

Case IV.—Mrs. B—, a widow, aged 43, no children, applied for treatment, saying that for several months she had been under the care of different physicians without improvement. She suffered from metrorrhagia and had taken aromatic sulphuric acid, ergot, in truth nearly all the hæmostatics, without avail. She was very anæmic and much debilitated. She was directed to discontinue all other remedies and was ordered fld. ext. mistletoe in doses of 30 drops thrice daily. Under this treatment there was slight improvement, and the dose was

increased to a drachm. Improvement was now more marked, but fearing that the fluid extract was not as reliable as it should be, she was ordered a decoction of mistletoe (strength, mistletoe two ounces, to water a pint and a half, boiled down to a pint and strained) in doses of one ounce every six hours. In a few days the hemorrhage ceased entirely and has not since reappeared. The patient expresses herself as feeling better than she has for years, and is rapidly gaining flesh.

CASE V.—Mrs. F—, aged 27, married, and mother of four children. She tells me that during the last year she has, at short intervals, flooded severely, and at one time came near dying before a physician could be called. She has now been flooding for about a week, and, under the care of another physician, has taken various remedies without relief. Examination revealed the womb much enlarged and retroverted, the os patulous, soft, and spongy to the touch. She is now taking ergot without apparent good effect. I therefore discontinued the ergot and ordered fluid extract mistletoe in drachm doses every six hours. She began at once to improve, and in two days, the extract giving out and having no more at hand, she was ordered a decoction of like strength and dose as Case IV. After the first dose of this she ceased to flood, and an interval of six weeks having elapsed without further trouble, she was placed under treatment for the existing metritis, and has since borne two children and enjoys fine health.

CASE VI.—Mrs. H—, primipara, aged 45, is subject to frequent severe floodings. Was ordered to use the decoction of mistletoe steadily for several weeks. The floodings have not since recurred.

CASE VII.—Mrs. N—, widow, aged 65, very anæmic, and subject to frequently recurring and very profuse epistaxis. During an unusually severe fit of bleeding, after ergot had failed to give relief, she was advised to use a decoction of mistletoe. A good result was almost immediately obtained, and since that time she informs me she has frequently used the remedy for the same trouble, and with universally good effect.

CASE VIII.—Mrs. H—, who is in the second stage of tubercular phthisis, has been bleeding freely from the lungs for a number of hours. Having no ergot at hand, a decoction of mistletoe was administered, and in less than an hour the hemorrhage ceased.

The following notes of two cases of bronchial hemorrhage treated with mistletoe were given me in a letter from a professional friend:—

"No. 1. Second stage tubercular phthisis. Frequent large hemorrhages for over two years; ergot, salt, and gallic acid, he said, had been frequently used in previous hemorrhages, but they acted very slowly, and it was a question whether the hemorrhage ceased from their use. The attack he had, when I saw him, began after a violent fit of coughing when he was within a square of the hospital. He came to me at once, and I gave half a drachm of the extract of mistletoe, and repeated the amount in fifteen minutes. After the first dose the hemorrhage ceased."

"No. 2 said he had been perfectly well till within a week, when he had a cough, tight and ringing. Without apparent cause had violent hemorrhages, and came at once to hospital. Administered at once a half drachm of extract; in fifteen minutes the dose was repeated; twenty-five minutes after this hemorrhage ceased."

And so I might go on citing case after case, from my own practice and that of others, illustrative of the value of mistletoe in conditions similar to those above detailed; but these will suffice to indicate its usefulness. In country practice I almost daily prescribe a decoction of mistletoe, and I fully believe that at no distant day the remedy will enjoy the confidence of the profession at large.—*Medical and Surg. Reporter.*

THERAPEUTIC NOTES.

TREATMENT OF DISEASES OF THE SKIN.

Formulas abstracted from an advance sheet of "A Practical Treatise on Diseases of the Skin," by John V. Shoemaker, M.D. Appleton & Co., New York:—

ECZEMA, VULVÆ OR VAGINÆ—ECZEMA OF THE VULVA OR VAGINA.

℞.	Extract of belladonna	gr. v.
	Arsenious acid	gr. j.
	Extract of opium	gr. ij.
	Sulphate of quinia	℈j.
	Oil of theobroma	q. s.

Mix and divide into 20 suppositories.

Sig.—Insert one in the vagina four times a day.

ECZEMA ACUTE.

℞. Carbonate of magnesium . ℥ss.
Aromatic spirit of ammonia . ℥j.
Tincture of rhubarb . . ℥ss.
Peppermint water . . . ℥iv.
Syrup of lemon . . . ℥ij.
M. Sig.—One tablespoonful three or four times a day.

ECZEMA, CHRONIC.

℞. Arsenious acid . . . gr j.
Extract of belladonna . . gr. v.
Extract of calamus . . ℈ij.
Mix and divide into 20 pills.
Sig.—One pill three times a day.

ECZEMA, CHRONIC.

℞. Icthyol (sulpho-icthyolate of sodium) . . . . ℈j.
Divide into 40 pills.
Sig.—One to ten pills a day.

ECZEMA, ACUTE—(TETTER).

℞. Sulphate of morphia . . gr. j.
Tincture of gelsemium . . ℥j.
Bicarbonate of sodium . . ℥ss.
Camphor water . . . ℥ij.
Spirits of nitrous ether . . ℥iiss.
M. Sig.—One or two teaspoonfuls every three or four hours.

ECZEMA, ACUTE—(TETTER).

℞. Sulphate of magnesium . ℥ss.
Tincture of aconite root . ♏xij.
Syrup of senna . . . ℥j.
Water . . . . . ℥iij.
M. Sig.—One dessertspoonful every four hours.

ECZEMA, CHRONIC.

℞. Venice turpentine . . gr. v.
Extract of belladonna . . gr. v.
Extract of gentian . . ℈ij.
Mix and divide into 20 pills.
Sig.—Four to six pills a day.

ECZEMA, CHRONIC.

℞. Tartar emetic . . . gr. ij.
Sulphate of quinia . . ℈ij.
Mix and divide into 20 pills.
Sig.—One pill four times a day.

ECZEMA, INFANTILE.

℞. Syrup of iodide of iron . . ℥j.
Fluid extract of malt . . ℥v.
M. Sig.—One-half to two teaspoonfuls three times a day.

ECZEMA FACIALIS—(ECZEMA OF THE FACE.)

℞. Ext. belladonna . . . gr. v.
Bismuth subnit. . . . ℥iij.
Ungt. simp. . . . . ℥j.
M. Sig.—Apply three times daily.

ECZEMA, INFANTILE.

℞. Calomel . . . . . gr. v.
Sugar . . . . . ℈j.
Mix and divide into 5 powders.
Sig.—One powder every second or third day, followed with one-half teaspoonful of carbonate of magnesium or a teaspoonful of castor oil.

ECZEMA, ANI—ECZEMA OF THE ANUS.

℞. Arsenious acid . . . gr. j.
Extract of hyoscyamus . gr. iv.
Carbonate of iron . . ℥j.
Ol. theobroma . . . q. s.
Mix and divide into 20 suppositories.
Sig.—Insert one four times a day.

ECZEMA, SCROTI—ECZEMA OF THE SCROTUM.

℞. Tinct of Hoang-Nan . . ℥iij.
Sig.—Two to twenty drops in water every three or four hours.

EPITHELIOMA—EPITHELIAL CANCER—SARCOMA —CARCINOMA.

℞. Powdered bloodroot . . gr. x.
Extract of conium . . gr. x.
Extract of hyoscyamus . gr. iv.
Mix and divide into 30 pills.
Sig.—One pill three times a day.

EPITHELIOMA—EPITHELIAL CANCER—SARCOMA —CARCINOMA.

℞. Arsenious acid . . . gr. j.
Extract of belladonna . gr. v.
Sulphate of quinia . . gr. xl.
Mix and divide into 20 pills.
Sig.—One pill three times a day.

EPITHELIOMA—EPITHELIAL CANCER—SARCOMA —CARCINOMA.

℞. Arsenite of sodium . . gr. j.
Iodide of iron . . . gr. xl.
Mix and divide into 20 pills.
Sig.—One pill three times a day.

EPITHELIOMA—EPITHELIAL CANCER—SARCOMA —CARCINOMA.

℞. Sulphate of morphia . . gr. ij.
Bromide of sodium . . ℥iij.
Syrup of lactucarium . . ℥v.
M. Sig.—One tablespoonful every two or three hours until relieved of pain.

ERYSIPELAS.

℞. Tartar emetic . . . gr. j.
Camphor water . . . ℥iij.
Spirits of nitrous ether . . ℥iij.
M. Sig.—One tablespoonful in water every one or two hours.

ERYSIPELAS.

℞. Hydrochlor. of pilocarpine gr. j.
Tincture of aconite root . ♏xxiv.
Water . . . . ℥iij.

M. Sig.—One teaspoonful every three or four hours.

LAXATIVE CURRANTS.

A very agreeable purgative for children are the passulæ laxativæ, of the Danish Pharmacopœia. Four ounces of senna leaves are digested for half an hour, with eight fluid ounces of hot water, thrown on a strainer, and expressed sufficiently to make six fluidounces, which are boiled to a syrup with twelve ounces of sugar. Pour the hot syrup over twelve ounces of well-washed currants (Corinthian raisins) and mix well with three drachms of powdered Ceylon cinnamon. The dose is one to two teaspoonfuls.—H. M. WILDER, in the *Pharmaceutical and Chemical Gazette*.

TEETH PRESERVATIVES.

Professor Miller, (Therapeutische Monatshefte) gives the following formulæ of preparations that have been tested:—

℞. Magnes. carbon.
Rhiz. irid. flor.
Talci.
Sapon. medicati . āā 5.0 gram.
Ol. menth. pip. . . gtt. x.
Mucil. acac. . . q.s. ut fiat massa.
Calc. carbon. præc. . 100.0
Rhiz. irid. flor. . . 5.0
Oss. sepiæ pulv. . . 4.0
Sacchar. alb. . . . 2.0
Myrrh. pulv. . . . 2.0

Mell. et glycerin. q.s. ut fiat pasta.

In respect to a mouth-wash water, intended as a preservative of the teeth, the author stipulates that it should not simply prevent the development of the fungoid vegetation, but that it should kill it within one minute. The requirement is not met, for instance, by peroxide of hydrogen, since a five per cent. solution failed to kill the fungoid growth in fifteen minutes. The following formulæ are given for suitable preparations:—

℞. Thymol . . . 0.25 gram.
Acid. benzoic . . 3.00
Tinct. eucalypti . 15.00
Alcohol absolut. . 100.00
Ol. gaultheriæ . . gtt. xxv.
Or, ol. menth. pip. . gtt. xx.

Sig.—One teaspoonful to be added to a glass of water.

℞. Thymol . . . 0.3 gram.
Sp. cochlear
Sp. meliss. comp. āā 30.0
Tinct. ratanh. . . 10.0
Ol. menth. pip. . . 0.5
Ol caryophyll. . . 1.0

Sig.—Ten drops to be added to half a glass of water.

CHRONIC GONORRHŒA.

℞. Morphia sulphatis . . gr. iv.
Tinct. belladonnæ . . ℥j.
Ext. geranii . . . f℥j.

M. Sig.—Add twenty drops to a tablespoonful of water, and use as an injection every second day.

DYSMENORRHŒA.

℞. Morphia sulphatis . . gr. j.
Tinct. hyoscyami . . . ℥ss.
Ext. cimicifugæ . . . f℥ij.
Elix. simp. . . . . ℥j.

M. Sig.—Teaspoonful every three hours.

CYSTITIS.

℞. Morphia sulphatis . . gr. j.
Tinct. aconiti rad. . . ℥ss.
Potassii acetatis . . . ʒss.
Ext. pareiræ . . . . f℥j.
Aqua . . . . . ℥ij.

M. Sig.—Two teaspoonfuls, in water, every three hours.

HÆMOPTYSIS.

℞. Morphia sulphatis . . gr. j.
Tinct. veratri viridi . . ♏xx.
Ext. geranii . . . . f℥vj.
Vini Portense . . . ℥ij.

M. Sig.—Two teaspoonfuls every hour and a half.

CHORDEE.

℞. Tinct. gelsemii . . . ℥j.
Potassii bromidi . . . ʒss.
Aqua . . . . . ℥iij.

M. Sig.—Two teaspoonfuls after meals and at bedtime.

TYPHOID PNEUMONIA.

℞. Tinct. digitalis . . . ℥j.
Tinct. nucis vomicæ . . ℥iss.
Tinct. capsici . . . . ℥j.
Spts. vini gallici . . . ℥iiss.

M. Sig.—Teaspoonful every three hours.

CHRONIC MENINGITIS.

℞. Potassii iodidi . . . ℥ij.
Tinct. calumbæ . . . ℥j.
Spts. ammonii aromat. . . ℥iss.
Aqua . . . q. s. ad. ʒvj.

M. Sig.—Dessertspoonful after meals.

THE
Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
F. A. DAVIS, Att'y, Publisher.
A. L. HUMMEL, M.D., Business Manager.

Philadelphia, Oct., 1887.

SPIGELIA.

SPIGELIA MARILANDICA, better known as pink-root, is without a superior as an anthelmintic. It is especially effective in procuring the death and expulsion of lumbricoid or round worms. The most efficient preparation is the fluid extract, the dose of which as a vermifuge varies from five to fifteen drops for children, and from half a drachm to a drachm and a half for adults.

Apart from its worm-destroying powers, spigelia possesses other therapeutical properties which are worthy of investigation. In small doses it acts as an excellent stomachic tonic, improving the appetite and assisting digestion, even in cases where no intestinal parasites exist. It is also useful in gastralgia and in flatulent colic. Melancholia, occurring at the climacteric, may be frequently relieved by it after various other remedies have failed. Chorea, and the milder forms of hysteria may be often permanently cured by the persevering employment of small doses of the same remedy.

A NEW FORM OF SKIN DISEASE.

JONATHAN HUTCHINSON, in a paper recently read before the Royal Medico-Chirurgical Society, presented a report of five cases, which from their similarity in character and unusual occurrence, may be regarded as examples of a new form of skin disease. The first manifestations of the disease consist of superficial ulcerations of the lips and various parts of the mouth, followed sooner or later by the development of lesions upon various portions of the integument, accompanied by general debility, and tending to a fatal termination.

The hands and feet are the localities usually attacked, the nails becoming fissured and brittle. The eruption may consist of bullæ, which are followed by free papillary outgrowths. The patients attacked are usually in middle or advanced age. No special antecedents can be alleged as the probable cause of the malady. Unless checked by treatment the disease appears to run its course in about six months, producing death by exhaustion. There seems reason to believe that opium given in repeated doses will cure it, and that there is, at any rate, in some cases, no tendency to relapse afterwards. All the best marked cases as yet observed have occurred in males, but in several milder ones the patients were women. Of the most characteristic, two were master tanners, one a farmer, one a clergyman, and one a gentleman of no occupation; all these resided in the country. Careful inquiry has failed to support the suspicion that the disease might perhaps be due to contagion from animals. Of these five cases two ended fatally and three in recovery. The patients who died were those first observed, and since the discovery of the signal efficacy of opium no case has ended in death. The observation as to the efficacy of opium was simultaneously made by Mr. Pollock, the President of the Society, and by Mr. Hutchinson, two different patients being at the same time under their separate treatment and recovering under this drug. Since then every case has yielded if the dose of opium were sufficiently pushed. In one, however, the disease did not yield quickly, and for more than a month seemed likely to end in death.

As regards permanency of cure, in one case the patient is known to be quite well four years after his recovery, in another there is reason to believe that such is the fact, and in a third a period of two years had elapsed. In two of the milder cases, occurring in younger patients, the disease has repeatedly relapsed.

A great variety of remedies had been tried without benefit before the use of opium was resorted to. In no single case has there appeared to be any tendency to spontaneous improvement.

In all cases, the inflammation of the lips and mouth took definite precedence of the skin symptoms, and in some the latter were very slight.

Mr. Hutchinson is not able at present to express a detailed opinion as to the causes or nature of the malady. He believes, however, that it is allied to other forms of disturbed health attended by skin disease and occurring in early senile periods, such as certain peculiar varieties of psoriasis, pemphigus, lichen planus, and pityriasis rubra. In confirmation of this suggestion, and as an appendix to the paper, he narrated a case in which an elderly lady had a kind of spreading eczema psoriasis of the hands and scalp. She lost her nails and all her hair, and was rapidly failing in health in spite of various measures of treatment, but finally recovered quickly and completely under opium. Her case does not belong to the group described in the paper, because she never at any time had inflammation of the mouth.

COUNTER-PRESCRIBING.

NOTWITHSTANDING the unanimous manner in which pharmaceutical conventions have year after year passed resolutions condemnatory of counter-prescribing, the usurpation of the physicians' business by the pharmacist has become almost universal. The skeptic on this point need only stand for a few minutes in either a palatial temple of pharmacy or the most modest of drug stores, to satisfy himself that a walking patient, no matter what the ailment may be, is almost never turned away.

In all the large cities, three-fourths, if not more, of all venereal cases receive their first medical advice from an enterprising druggist or his dapper assistant. Many of these unfortunates are drugged for weeks with the most nauseous mixtures, and, finally, when their money is exhausted, they are coolly directed to go to a dispensary for further treatment. Many cases of incorrigible gleet or stricture are due to the maltreatment of these avaricious quacks. Bronchitis, Bright's disease, malaria, incipient phthisis, and a host of other affections are regarded by them as affording a field for displaying their ability and filling their pockets at the same time, consequently they are always ready to supply "a little preparation of my own," which can be confidently relied on to yield at least 500 per cent. profit to the dispenser.

As the law does not reach these mercenary meddlers, physicians must act in self-defense. The remedy is in their own hands. They can protect themselves and their patients most effectually by dispensing their own medicines where ever practicable. This can be done at a comparatively trifling expense, and should be made the rule of practice in walking cases especially. When this is done the patient is benefited as well as the physician. The former is assured of pure medicines without being compelled to pay an exorbitant price for them. The latter is certain that his patient has received the proper remedy, and that at least one prescription will not be passed around the block or repeated thirty or forty times.

IRRITABLE BLADDER.

THIS annoying affection may be produced by any one of a variety of causes. In some cases it is the result of exposure to cold. In others it is due to the irritating character of the urine, or to the presence of calculi. It may also be due to malaria, or to reflex irritation from stricture, hemorrhoids, or urethral caruncles. The treatment should be directed first to the discovery and removal of the inciting cause. One of the most distressing cases we have ever seen was that of a lady aged thirty-two, who was compelled to micturate every half hour daily, and ten or twelve times through the night. Inquiry revealed that she had been under the care of a noted gynæcologist, who insisted on forcibly dilating her cervix uteri twice a week. As the operation gave her intense pain, and was always followed by an aggravation of the bladder difficulty, no prophetic skill was needed to divine the origin of her distress. Rest in bed, with avoidance of the gynæcologist, and the administration of belladonna and dilute phosphoric acid, brought about a complete and permanent cure in four weeks.

Cases due to exposure to cold yield readily to ten grains of Dover's powder at bedtime, or to ten drops of laudanum given in a tablespoonful of Port wine every two hours If from idiosyncrasy or other causes it be deemed inadmissible to give opium in any form, prompt relief can be obtained from bromide of potassium in half-drachm doses every hour.

Malarial irritability of the bladder is of comparatively frequent occurrence, and requires large doses of quinine.

Cases due to acidity of the urine are promptly benefited by the bicarbonate of sodium or potassium, and other alkalies, well diluted. Apollinaris water is also agreeable and beneficial.

If calculi are present, permanent relief can only be obtained by their removal, but marked temporary benefit can be secured by the administration of belladonna. In many cases it is more effective in allaying spasm and relieving pain than opium or any other anodyne. It may be given alone, or in combination or alternation with alkalies.

It is also palliative in cases due to reflex irritation.

MEDICAL NEWS AND MISCELLANY.

BACK NUMBERS OF THE MEDICAL BULLETIN WANTED.—Subscribers sending us any of the following numbers of THE MEDICAL BULLETIN will have their subscriptions extended two months for every such number sent, viz: March, 1885, February, 1886, and August, 1886. Send to 1217 Filbert Street, Philadelphia.

MALARIA *vs.* MONEY.—In a private letter to the editors, a correspondent at Funny Louis, La., closes with the laconic remark, "Lots of malaria and but little money here. Are they antagonistic?" The question reverses our ponderous cerebral machinery, and we remember that during the past year a Dr. Billings, by a clever series of maps and an ingenious, if not convincing process of logic, arrived at the conclusion that malaria and brains were incompatible. As a reward he has received the usual laurel crown of philosophers, and now rests complacently before the admiring gaze of the world. He would doubtless welcome our correspondent as a promising disciple, and possibly share with him his effulgent honors. We are pleased to note this evidence of intellectual vigor of a denizen of a malarial district. Perhaps it was not brains, but money that Dr. Billings found malaria antagonistic to. We trust this may be so; for 'twould grieve us much to part with our intellect, while a separation from our money would incommode us but little.—*Mississippi Valley Med. Monthly.*

THE WORK OF THE GENERAL PRACTITIONER.—In these latter days of medical advancement there is a lamentable tendency to depreciate the work of the general practitioner as compared with the work of the specialist and professor, the clinical teacher and consultant, the pure physician and the pure surgeon. A doctor, in the broad, old-fashioned sense, is not without honor, except among those of his own profession, if he be not a physiologist, a bacteriologist, or something equally particular and notable. This is very unfair, even apart from the wide public benefits conferred by the general practitioner, who is at the beck and call of every one, and, if he be a conscientious physician, is weighed down with the responsibility of developing his skill in a circle, The general practitioner is eminently useful to the profession, for none have so wide a range of observation as he, and it is to him we owe the most important etiological facts within our grasp. It is his statistics and his inferences that have been the incentive to investigation leading up to the notable discoveries in medical science. His agency has been most active in repelling the advances of those dread zymotic diseases which formerly decimated the world. Who more than he has furthered the brilliant attainments in obstetrics and surgery? The ignominy of standing as a mere private in the ranks of the profession is more than swallowed up in the splendid achievements of general practice. The man who fills this important place need not feel that his work ends with his individual successes. His labors may and ought to become largely tributary to the work of the profession, by whom the significance of his efforts should be generously felt and recognized.—*Med. Reg. Ed.*

NERVE TONIC AND APHRODISIAC.—Professor Francis Hemm gives, in the National Druggist, the following formula:—

℞.	Jensen's crystal pepsin	gr. cxxviij.
	Ext. damiana :	f℥ij.
	Phosphorus (transparent pcs)	gr. 1¼.
	Tinct. nux vomica	♏cccxlviij.
	Absolute alcohol	℥iss.
	Glycerin	℥ij.
	Hydrochloric acid	♏xxx.
	Syrup	℥vj.
	Comp. elix taraxacum	f℥j.
	Elix. orange, to make	℥xvj.

Mix the glycerin, syrup, compound elixir taraxacum, hydrochloric acid, and elixir orange, add the pepsin and dissolve in the mixture, then add the fluid extract of damiana and tincture nux vomica. Put the absolute alcohol in a bask, add the phosphorus, warm gently in a water bath until perfect solution is obtained, keeping up the full measure of alcohol. When cool, add to the mixture, make up the full measure, if necessary, by adding elixir of orange, and filter. Every fluid drachm contains about one one-hundredth of a grain of phosphorus, one grain of pepsin, seven and a half grains of damiana, and three minims of tincture of nux vomica.

THE AB INITIO GYNÆCOLOGIST.

By a truthful poet of old it has been said
That fools rush in where angels fear to tread.
A forcible illustration of this, I ween,
In the ways of divers medical men is seen.
The plain "M.D." is hardly enough ornate
To grace the name of one whose ultimate fate
Must be to stand on the very topmost round
Of the ladder of fame, so far above the ground
That he can't even see the place from which he has risen,
For no other name will be half so great as his'n.

[N. B.—I first wrote "from which he has riz," and "so great as his," but my wife said "riz" was not correct, and that it ought to be "risen;" so I changed it, and then had to make it "his'n," to rhyme.]

So, when he goes forth to practice the healing art,
He never once thinks of playing the humble part
Of "physician" or "surgeon," or even both combined,
But one of the "ologies" better suits his mind
As likely to furnish a title grand enough
To follow the name of the famous (?) Dr. Puff.
Now, when the Lord, as recorded in Holy Writ,
The big round world had fashioned and made fit
For a dwelling place for His latest creature, man,
He reviewed His work, and found that the mighty plan
Was incomplete while Adam remained alone;
So, taking out from our forefather's side a bone,
He formed a woman, the masterwork of all.
Highest on earth is she now, as before the fall,
Not from the elements crude, like Adam, first,
Made from the dust, she into being burst,
With all the loveliness of that form divine,
In the image of God created, and to shine
With added beauty, of finer material made,
Of matter in which His power had been displayed
Already. So, organs by far more intricate still
Than man's were molded in her by creative will.
Behold! Here a subject fit for the mighty mind
And towering genius of Puff, M.D., we find.
His brain surcharged and ready to burst with knowledge, he
Can stoop to nothing lower than gynæcology;
No use has he for fractures or dislocations;
He takes more pride in cervical lacerations.
He never has treated a fever nor diarrhœa,
But plumes himself on his skill with the ecraseur;
And he's scarcely untied the ribbon from his diploma
Till he longs to tackle a uterine sarcoma.
In a case of asthma or phlegmasia dolens
He's bound to use the speculum, *nolens volens*.
Whether a cough or gastric irritation,
The first step is bi-manual palpation.
Whether the patient has a cold or fever:
A vaginal injection will relieve her;
And if a girl has fits or double vision,
He's ready to try clitoridal abscission.
If a lady calls for something for her complexion,
He suspects she has an ante- or retroflexion,
And he couldn't prescribe a dose of benzoinum
Till he'd examined the patient *per vaginam*.
Well, gullible human beings will be gulled,
And fools will even pay money to be fooled.
And, as the wise of earth are very few,
Our specialist soon has more than he can do.
Day after day his patients come and go.
And into his pockets in streams the dollars flow.
And while his neighbor, who is only plain "M.D.,"
Through tempest and night must ride his sick to see,
Through heat of summer and winter's icy blast,
And gets but scanty pay for it at the last.
The hot-house specialist, in his easy chair,
Attends to the patients who to him repair,
Or makes his visits at hours to suit himself,
And promptly upon the first collects his pelf.
What matters it that as the day goes by
His patients grow no better, and many die,
Victims of ignorance on his part and theirs?
Others soon fill their places on his stairs.
So long as human nature is what it is
Grists will be plenty for all such mills.

—Chas. M. Ramsdell, A.M., M.D., of Lampasas, Texas, in *Courier-Record*.

The Treatment of Opium Poisoning by Nux Vomica.—Dr. Davidson, Sharon, Ga., recently reported a case of opium poisoning cured by the hypodermatic injection of ten grains of the extract of nux vomica. Reading his account brought forcibly back to my mind the proceedings of a would-be suicide who swallowed two grains of morphine, and, to be certain, over one grain of strychnia one minute after. While the action of strychnia predominated, it was kept so far in check by the morphine that mild convulsions only took place and he fully recovered, without any treatment, in a short while. This would-be suicide was only sixteen years old.

Opium kills by paralysis of the respiratory centre. Strychnia usually terminates life by spasmodic fixation of the diaphragm and respiratory muscles. Opium is the great anti-spasmodic, while strychnia may be called the spasmodic. I determined to try this treatment in any given case, and, as it was, I had a very fair chance for it. Mrs. —, æt. 64, was sick, and, having given her repeatedly morphia, I thought I was certain that she could bear it well. One evening I directed one-quarter grain of morphia every four hours. A messenger gave me next morning a very lucid account of her condition, and I could not doubt but that she was poisoned by the morphine. I had one grain sulphate of strychnia dissolved in half ounce of water, and went. Found her insensible. Respiration four per minute; pulse feeble, rapid, and irregular. I gave her in a quarter of an hour, two hypodermic injections of strychnia,—one-tenth grain each. Being able to rouse her, I then gave her every quarter of an hour one cup strong coffee, with infusion of capsicum and one-tenth grain strychnia. I noticed the first improvement in two hours, when the pulse got strong, almost bounding. In less than three hours the sixty-four year old lady had taken in all one grain strychnia, when I, for the first time, noticed twitching of the extremities, when I desisted from giving her more. Only then the respiration improved to six, then eight, and then ten per minute.

Three hours after that,—six hours after beginning of treatment,—respiration normal; awake, and was feeling pretty well.

She drank the large doses of infusion of capsicum without remark until she began to improve, when she made a remark about the pepper tea. —N. Stadler, M.D., *N. O. Med. and Surg. Journ.*

A Resume.—The Ninth International Medical Congress is now a thing of the past, and for many reasons will mark a new epoch in the history of American medicine. That it was a success cannot be gainsaid even by those who sacrificed honor, integrity, and patriotism, who left no stone unturned to bring disgrace to a profession that has ever been noted for its hospitality, and who endeavored to leave a lasting impression of "littleness" in the minds of those who came to seek information and bring material for future development to our so-called harmonious homes. The Congress was noted for its good work—work

of as high an order as has been accomplished at either the Copenhagen or the London Congress. This was the unanimous verdict of uninterested workers who had attended the last three meetings.

The few who absented themselves would unquestionably have added more good work, but no better, that was impossible. "Nature abhors a vacuum, and there is no man who can sufficiently pride himself that his place will not be filled." The malcontents have had a curious demonstration throughout this Congress. They saw their places filled, ably filled, and have had shown to them those who shall succeed them, should they in the course of events follow the way of all things earthly. This is a pleasure which is not usually vouchsafed "we great men."

We have been victorious; therefore, let us be merciful. We have saved the honor of our country; we have upheld its name for hospitality and good fellowship; we have saved our profession the disgrace of having a finger pointed at us in the future, and the slur, "There goes an American doctor," cast upon us. We now know that should this epitaph be applied to us, we may approach, extend the hand of fellowship, and be assured of a welcome, hardly earned and honestly due.

In point of numbers it was the second largest gathering ever held; the largest being that of England, in which sixteen hundred London physicians registered.

It must be borne in mind that the expenses connected with the Copenhagen Congress were not one-twentieth that entailed in a visit to this country, yet the English in our own Congress outnumbered those in the Danish gathering as ten to one.

So far as could be ascertained—and very few, if any, have been omitted—all the foreign members were unanimous in their high appreciation of the scientific work the Congress accomplished. They all said, never had entertainment been so gracefully, cordially, and liberally extended as that showered upon them by the individual entertainers of the Ninth International Medical Congress.

The gentlemen of the Local Committee of Arrangements have had a hard up-hill fight, and in place of the pricks that the gagged correspondents of the lay press have given them, deserve the utmost praise we of the profession can bestow upon them. We can give them no greater honor than join with the telegraphic communication of our *confrères* that reached us to day:—

"The undertaking of the conveyance of over three hundred guests nearly one thousand miles, under the most luxurious conditions of locomotion, and their entertainment for four days, represents an extent of hospitality unsurpassed at any former Congress."—*Med. Reg., Sept. 17th.*

CHLORAL HYDRATE.—The death of a lady prominent in society of this city, following the administration of chloral, to which she had been accustomed to resort for the relief of nervousness, has shocked the entire community, and seems to call for a repetition of a warning of the danger of this drug. Unlike other agents of the class of narcotics, its effects seem not to be proportioned to the amount: what might be given at one time with perfect safety becomes on another occasion a lethal dose. This is partially explained by the manner in which it acts upon the nerve-centres. In the first place, it has a sedative influence directly upon the ganglion cells of the cerebral hemispheres and spinal cord, and ultimately upon the medulla; in the second place, it exerts an hypnotic influence indirectly by reducing the blood-supply of the brain owing to the general dilatation of the arterioles elsewhere throughout the body. In ordinary doses, and as the rule probably, the indirect effect of producing relative anæmia of the brain is the effect which is sought after and obtained; where larger doses are given the direct effect becomes more marked.

It has been repeatedly observed that chloral is a dangerous drug, since patients accustomed to its use may be thrown into a fatal coma by doses smaller than those which they had frequently previously taken with impunity. Even so small a dose as ten grains has caused the death of an adult; while others have recovered without ill effect after swallowing an ounce. It is strange that this peculiarity has escaped the notice of so acute a therapeutist as Ringer, who says that "it has been given for months apparently without any bad results," and has much to say in its favor; but he neglects to mention its great danger when habitually resorted to for insomnia or nervous irritability.

We have observed that in some cases the fatal doses have been taken just after a meal, the coma rapidly supervening and the fatal termination occurring suddenly. Possibly the chemical changes incident to gastro-intestinal digestion may explain the excessive and otherwise unaccountable narcotic effect from the dose which is ordinarily taken with impunity when the stomach is at rest. It has been determined, from experiments made by Amory, that chloral ordinarily does not undergo decomposition in the body, and consequently does not liberate chloroform in the blood, as Liebreich affirmed. It is worth considering, however, whether Liebreich's original hypothesis may not be correct in these exceptional instances. Since, in the presence of alkali, chloral is readily converted into chloroform and formic acid, this may also occur, if not in the blood, at least in the duodenum when

chloral, mixing with the food, passes through the pylorus to come at once in contact with the highly alkaline bile. Under such circumstances given, the coexistence of a weak, dilated, or fatty heart, the liberation of an amount of chloroform too small to escape by respiration, or at least too insignificant to make its presence evident to the senses, might rapidly prove fatal. There may be other explanations for these very sad accidents that have occurred from small doses of chloral hydrate, but this one is at least sufficiently plausible to warrant us in warning our patients against taking chloral just after eating a hearty meal, or, indeed, at any other time, unless under the direction of competent medical advice.

The quality of the chloral should also be taken into consideration, and for medicinal purposes only pure recrystalized chloral should be used. —*Philadelphia Medical Times.*

LEAD-POISONING.—The recently discovered use of the poisonous salts of lead, notably chrome-yellow, as coloring matter in food, has brought about a timely inquiry into the nature and treatment of lead-poisoning. The unscientific mind finds difficulty in crediting the noxious properties of the salts of lead, inasmuch as they are not likely to produce immediate death unless taken in quite large quantities. A dealer in chrome-yellow, who sells it to bakers, etc., has attempted to defend himself, and prove the harmless character of the chemical by voluntarily drinking a tumbler of water containing half an ounce of chromate of lead in solution. This action was as silly as it was ineffectual. All the salts of lead are poisonous, but they are cumulative in their action, causing death by slow absorption into the system until the point of saturation has been reached. The salts of lead, used in the manufactures and arts, are obtained from the metallic oxide known as litharge or the protoxide of lead. The salts derived from this source are the carbonate of white lead, the acetate or sugar of lead, and the chromate or chrome-yellow. Chrome-red is made from chromate of lead by treating it with caustic soda. Carbonate or white lead is the substance so largely used by painters; the acetate or sugar of lead is used in medicine; the chromate or chrome-yellow in the arts and manufactures.

The first symptom of lead-poisoning is primitive saturnine intoxication—a blue line on the gums close to the edge of the teeth, caused by sulphide of lead. This is followed or accompanied by a peculiar metallic taste in the mouth and odor in the breath, a jaundiced skin and eyes, weakness, loss of appetite, emaciation, constipation, and consequent complications. There are four definite manifestations of lead-poisoning, which may be described as follows:—

1. Lead colic (colica pictonum, or painters' colic). Violent pains in the abdomen relieved by pressure, hardness, and retraction of the abdomen, obstinate constipation, slow, hard pulse, and other symptoms before mentioned, notably the blue line on the gums.

2. Lead rheumatism or arthralgia. General rheumatic pains, not accompanied by redness or swelling; relieved by pressure and increased by motion; cramps, hardness, and tension of parts affected.

3. Lead palsy or paralysis, affecting either motion or sensation; frequently loss of voluntary power over the extensor muscles, often affecting the arm and forearm, causing wrist-drop, which is difficult to cure.

4. Disease of the brain and spinal cord; paralysis, delirium, convulsions, and coma.

The proper general treatment for lead-poisoning is with sulphuretted baths, designed to form an insoluble black sulphide of lead with the lead salts on the skin. Give sulphurous, acidulated drinks for the same purpose—epsom salts (sulphate of magnesia) with lemonade or water acidulated with dilute sulphuric acid. The laxative action of the epsom salts will aid in carrying away the insoluble salts of lead formed by the sulphur. Small doses of potassium iodide are also used to dissolve the lead in the tissues and to eliminate it through the skin and kidneys. Electricity and strychnia should be used in case of paralysis. When a poisonous quantity of some lead salt has been swallowed give strong epsom salts in luke-warm water. If vomiting does not ensue, give, according to age, a few grains of sulphate of zinc, dissolved in warm water, and repeated every fifteen minutes until vomiting occurs. Dr. Murrell, in his admirable work, "What to Do in Cases of Poisoning" (pp. 98–101), gives excellent treatment for lead-poisoning, acute or chronic. Persons exposed to lead should use sulphur-water and soap for bathing; sulphuric acid lemonade for drinking, and should frequently employ laxatives to clear the system. This practice should be enjoined on painters, workmen in lead manufactories, etc. Cases of this kind, if promptly met by intelligent treatment, may often be shorn of their awful aspects. —*Med. Reg. Ed.*

SIMULATING ULCER OF THE STOMACH.—In the large outdoor clinique of the Public Dispensary a very great number of young women present themselves who complain of pain at the epigastrium after taking food. Out of the many hundreds of such cases which I have seen during the past ten years, but eight could be classed from the symptoms as "ulcer of the stomach;" but I have a very strong impression that even these eight aggravated cases, and which had markedly

the symptoms of ulcer of the stomach, in reality had not that disease, but that the symptoms were of hysterical or neurotic type.

The numerous cases of pain at the epigastrium after taking food are usually treated by diluted muriatic acid and quinine, taken after meals. Such of them as are of pre-phthisical type, are ordered half an ounce of cod-liver oil at bedtime, to be taken five or six evenings only, each week. As constipation often co-exists, they are told to drink the juice of five or six lemons each week. Pains are taken to prevent their suffering from cold feet at night. In the summer months a great many are induced to rise early and take a dip or swim in the sea, before breakfast, and before going to their daily work. I rarely, or ever, put such cases on any special diet, but advise them strongly to eat what they like best. Very often such cases have eccentricities of appetite, and prefer smoked and salted fish, salt meat, such as ham or bacon, to fresh meat; they often like pickled onions, vinegar, or fried or boiled onions, and Dutch cheese. Experience has shown me that such eccentricities of appetite should generally be yielded to. The patients, who may have been suffering from such "indigestion" for many months, or even years, are very generally made free from their suffering in a few weeks. A severe pain at the epigastrium after taking food is not a disease or affection of the stomach, but rather a neurosis, that may have its chief determining causes in very varied general conditions, both within the system and in environment. Out of the many hundreds of such cases, which included great differences in degree of severity, I could fix on eight only which could be fairly classed like ulcer of the stomach. I say like ulcer of the stomach, because all of the eight got well, and with somewhat unorthodox treatment.

The symptoms in these cases were severe pain at the epigastrium after food, pain also around the left side and over spine. The severe pain did not cease until vomiting took place. In two cases there was marked wasting, but all the others remained plump. In four of the cases the symptoms had existed over a year, in three others, over six months.

There is often a highly neurotic condition of the system, which may not show itself in downright hysterics; one such, who had very marked symptoms of ulcer of stomach for over a year, was an unusually well-formed, well-nourished girl, but of perverse and determined will. Another, with equally well-marked symptoms, was a stout, industrious, country servant of twenty-two. She got well in a month under muriatic acid and quinine, with the occasional use of Friedrichshall water. Another, of over a year's duration, was that of a stout girl of eighteen. She had one attack of hysteria. An elder sister had been very subject to hysteria. The fourth, of over a year's duration, had been under care for two years, with a good deal of moist râles in one lung; spontaneous dislocation of both sterno-clavicular articulations had evolved; she could put them out and in at pleasure. She was a girl of twenty-one, of perverse and strong will, and not much wasted.

One young woman, of nineteen, had been seized by the shoulders by a man, on a dark evening, when she was walking alone in the country. Frequent hysterical attacks followed during two months. These ceased, and then for a month followed well-marked symptoms of ulcer of the stomach. The symptoms passed off almost as suddenly as they came.

One girl of eighteen had been in a hospital for three months, under orthodox treatment, but without relief. She was emotional, but very, intelligent. Her only brother was semi-idiotic. I put her on a diet of mutton, potatoes with vinegar, and the tonic medicines referred to, and in a few weeks she was well. Two years after, she again showed symptoms of ulcer of the stomach, and had hospital treatment in a different part of England. She is now well.

Some years ago a married lady of thirty sent for me; her sister had died under my care with phthisis, Her father had died at forty, of sudden pleurisy. She had been under constant care for ulcer of the stomach for a period of three months; two consultants had seen her with her own medical attendant. I found her greatly emaciated, The lungs were sound. There was no uterine trouble. Though so emaciated, she was full of animation. I asked her what she would like to eat, her reply being "a mutton chop and stout." She had at once half a pint of stout with a mutton chop twice a day. I told her to take potatoes with her chop, and vinegar if she liked. On the second day I found her better, and in less than a week she was out and about, well.

A lady of thirty came to me some years ago who had just undergone the treatment for ulcer of the stomach for some months in hospital. She was greatly emaciated. The liver was rather large, and there was some stain of jaundice in the skin. I ordered her a daily dose of Carlsbad, to be sipped slowly before breakfast, but not in such quantities as to purge, also muriatic acid and quinine after meals. I put her on ordinary diet—that is to say, mutton, chicken, fish, potatoes, vinegar and lemons. She returned to me in a week, and said that she was well.

Ulcer of the stomach does happen, but in nearly ten years, with a large out-door clinique, and amongst the class of servants, shop-girls, etc., who are mainly subject to this disease, I do not think that I have encountered an absolute

case, although so many closely simulated this disease.

Occasionally, but rarely, the muriatic acid with quinine treatment has failed to relieve the pain at the epigastrium, the patients having then obtained relief from bismuth.—WM. H. PEARSE, M.D., *Medical Abstract.*

THE CONGRESS IN WASHINGTON.—In more than one respect was the Ninth International Congress a success. Some of our visiting *confrères* from Europe say that from a scientific standpoint no Congress ranks higher, and that the proceedings, when published, will reveal a wealth of learning among Americans of which the profession generally in Europe has been entirely ignorant. It is not from a boastful spirit that we quote this opinion, though even in that case we might be pardoned, since, truth to tell, many things have been said of us on the other side of the ocean that were anything but flattering.

Heretofore the knowledge of Europeans and Americans of one another—or we may in this case speak generically and say, of each other—has been one-sided. This is to be explained in great part by the one-sidedness of the visits. Many Americans go to Europe, but comparatively few Europeans come to America. Many of the Americans who go abroad, while wealthy, are not of the kind to produce a pleasant impression, or raise our country and institutions in the estimation of foreigners.

Let us hope that whatever pleasant impressions were produced on our visitors from abroad, from whatever country they came, may be so lasting that they and others may be induced to visit us again, and that, too, before another International Medical Congress meets in this country. We would gladly know them better, and would have them know us better. We would have them feel, and will endeavor to show them that as science is not bounded by geographical lines nor limited by oceans or mountain chains, and as each laborer in the field of science, however humble and unknown he may be, can claim all other workers as his brothers, more especially when their chosen field of labor is the alleviation of human suffering, so hospitality, good feeling, brotherly kindness can and do have a home in America. It is not impossible that many of our visitors came, as Dr. Martin, of Berlin, said he came, with some doubts. Let us hope that, like him, all went away from Washington with the doubts all removed. And such was the case, if he and Dr. Grailey Hewitt, Dr Landolt, and Dr. Edmund Owen represented in their remarks on the last day of the Congress the sentiments of the other visitors. Dr. Hewitt said he was requested on the part of the foreign members of the Congress to express in a few words the sense which was entertained by them of this Congress, and of the efforts which had been made by the Executive Committee of this Congress for the furtherance of the objects of this great meeting, and to convey to them the grateful thanks of the foreign members for the attention bestowed upon the matter, and their grateful appreciation which has attended their efforts. He desired also to express their sense of the hospitality and the kindness and attention which they had received, both in public and in private, which would make their visit to Washington a source of gratification and happy memories in the future.

Dr. A. Martin, of Berlin, expressed in German his thanks for the kindness he and other members of the Congress had received, and gratification at the success of the Congress. He had come here with some doubts. These were all removed, and the great success of this Congress would secure it a high rank among the Congresses that have been held. It had been the custom to engrave the names of the victors at Olympic games on plates of gold. They could not so record the names of their entertainers, and the only means of expression for their sentiments was by a vote of thanks.

Dr. Landolt, of Paris, said: "I have been commissioned to express to the President of the United States our sentiments of profound gratitude. Although feeling that I am unable to find words proper for the occasion, I accepted the honor, since the gratitude that springs from the heart has no need of eloquence to make it understood." When the applause that this sentiment produced had subsided, Dr. Landolt proceeded, saying:—

"Mr. President and gentlemen, we have already assisted at a series of International Congresses. We have been well received everywhere. The countries of Europe have rivaled each other in their zeal to make our stay with them in their most beautiful cities pleasant, but it has not often been our lot to see the Chief of the State mingle in person among us, and take part in our labors. The President of this great Republic came among us to bid us welcome with his sympathetic voice. He invited us to his own home and gave to each of us a hearty grasp of the hand, significant of his most cordial hospitality. The sanction given by President Cleveland to our Congress has given the greatest charm to our stay in this Capital. Returning to our hearths we will preserve the most grateful and respectful remembrance of the President of the Republic, and we say to the whole world that the United States, already so favored, possesses above everything a Chief who directs them surely in the way of progress and prosperity."

Dr. Edmund Owen thought he was admirably qualified to discourse on American politics, as he

was entirely ignorant of the subject. In science we have no politics. "We are extremely happy," he said, "to have visited the United States during the Presidency of Mr. Cleveland." He said he asked an American friend the other day, and a very intelligent man, if he voted for Mr. Cleveland, and the American said "No." Then he asked the American if he were satisfied now, and the laconic answer was, "Guess I am." "If that question were put to this meeting, 'are we satisfied?' I say, 'Guess we are.' A great man like the President might have found something else to occupy his attention, say in the White Mountains, about this time of the year, he might have been driven away by the doctors, but instead of that he remained here to welcome them. When the history of this grand country is written we trust President Cleveland will have a niche in the temple of fame side by side with those great men, Lincoln and Garfield. When you are in our country we love to hear you say, 'We admire your Queen.' We can say to you with all truth, we admire, we love your Queen, her beauty and grace, and in seconding this vote of thanks, we simply express a prayer that Mr. President Cleveland and Mrs. Cleveland may long continue in strength and health to preside over a happy, a prosperous, and a united country.—*Journal of American Medical Association.*

TOBACCO: SAFE AND UNSAFE METHODS OF EXHIBITION.—The authors and compilers of the "United States Dispensatory" were gentlemen of the highest attainments, and did not fail in properly estimating the delicacy of their task of assigning to each article of the materia medica its just rank as a curative agent; nor in pointing out the line at which it ceased to be beneficial and verged toward danger.

The desire of retaining in the list a drug which was capable of much good in the hands of the prudent and experienced, led them to hedge about certain articles in such a way as to impel the cautious to err by excess of prudence; but this anxious care had little effect in deterring the inexperienced, the bold, and the rash from risking everything in the hope of signal and triumphant success.

There is no drug included in the materia medica, of which it is more necessary to be careful in regard to its introduction into the human system, a carefulness which shall result in the absorption by the tissues of just the amount required to accomplish a therapeutical result and no more, than tobacco. There is one method of exhibition spoken of by medical writers. This exactness can rarely be attained, in which the drug once given passes from the control of the person administering it, and is liable to cause the gravest condition, even death; I mean the injection of the infusion into the rectum.

Though this form of application is mentioned by the late Professor George B. Wood as permissible, the warning which he gives shows his fears as to its use. It would have been better, perhaps, if his sanction had been withheld, or that his admonition had been set in the boldest type. With this permissive sentence eliminated from the text, and the word "or," which follows, the directions may be pronounced admirable: "As a narcotic it is employed chiefly to produce relaxation in spasmodic affections. For this purpose (the infusion or smoke of tobacco, or), the leaf in substance, in the shape of a suppository, is introduced into the rectum in cases of strangulated hernia, obstinate constipation from spasm of the bowels, and retention of urine from spasmodic stricture of the urethra."* He adds this wholesome advice, which is of the highest importance, and should receive the gravest emphasis: "It should be used with great caution. This remark is applicable to all the modes of using tobacco, particularly to the injection of the infusion into the rectum."

There is no suggestion in the "Dispensatory" article of an antidote to tobacco, and the measures to be taken in case of poisoning by it are stated in a very few words. As they occur at the close of a long paragraph, they do not stand out as distinctly as is desirable: "In cases of poisoning from tobacco, the indications are, after evacuation of the poison, to support the system by external and internal stimulants, and to allay irritation of the stomach by opiates." The directions of Pereira are fuller and more specific: "If the poison has been swallowed, let the contents of the stomach be withdrawn as speedily as possible. No chemical antidote has been demonstrated, but the vegetable astringents (infusion of nutgalls, green tea, etc.) deserve attention. As anti-narcotics, the vegetable acids and coffee may be administered. When the depression of the vascular system is extreme, ammonia and brandy may be administered with good effect, and frictions employed. Artificial respiration should not be omitted, when other means have failed."†

It may be here stated that tannin, the active principle of the vegetable astringents mentioned by Pereira as worthy of attention in counteracting the effects of the poison, is claimed by some authors as a chemical antidote to nicotine.‡

So little is tobacco used by medical practitioners of the present generation, that few of them, perhaps, have witnessed the utter relaxation which it produces in the human system—an unharnessing, so to speak, of the muscular apparatus,

* United States Dispensatory.

† Pereira, Materia Medica, Philadelphia, 1845.

‡ Lersch, quoted by Von Bœck, Vegetable Poisons, Art. Nicotine, Von Ziemssen's Cyclopædia.

which follows the administration of no other drug. While yet young in the practice of my profession, I encountered two desperate cases of incarcerated hernia, which called for the most powerful relaxant known to medicine. I chose tobacco; and was happy in eschewing the infusion and using the leaf—the ordinary cut tobacco—as a suppository. The results, I cannot but esteem brilliant, even in the light of the appliances of the present day—a relief being obtained in a very short space of time. On one occasion, in which a hernia in one of the cases referred to had resisted for many hours the best directed efforts of some capable physicians, I was pleased to find the protrusion released within an hour by the aid of the suppository. So complete was the paralysis of the sphincter ani, that it released its grip of the tobacco, which was found lying outside—the anus being open sufficiently to admit a finger. The application had proved to be self-regulating—coming away when no longer needed. The amount of the drug used was about sufficient to fill the bowel of the common smoking pipe, estimated at twelve grains. The particles were held together by threads wrapped about them, the ends of which being allowed to protrude, afforded a suitable means of withdrawal. Professor Henry H. Smith showed his class (1868–9) how to use the "fine cut" wrapped in lace-like tissue.

In the Medical and Surgical Reporter, March 24, 1860,* I related two cases of strangulated hernia to which reference has already been made, in which the incarcerating structures gave way under the use of the tobacco suppository. They are very striking, and, I think, instructive cases; and as they will be new to the greater part of the present race of practicing physicians, I take the liberty of reproducing them.

J. C., aged 75 years, had an inguinal hernia of long-standing. It became incarcerated on the twenty-ninth of August, 1854. The size and tension of the tumor were extreme. All known methods of reduction unsuccessfully exhausted, I introduced a suppository of tobacco. In a short time the tumor had palpably relaxed, and soon entirely yielded. On the fourth of September following, he had a relapse. By all the usual means, skillfully and perseveringly applied by two neighboring practitioners, together with the exhibition of chloroform, it proved wholly irreducible. I saw him at four o'clock, P.M., and determined to try the remedy which had once before relieved him. In about one hour from the employment of the suppository, the tension was so much lessened, that a considerable part of the protruded mass was returned by taxis; and soon after, whilst waiting events, the remainder of the tumor spontaneously subsided.

* Vol. iii., page 559.

J. M., aged 70 years, has also had an inguinal hernia from youth. Twenty years since, it became strangulated, and relief was obtained by an operation. In November last (1859), at seven o'clock, A.M., he had a protrusion, and was unable to return it. He was at once seized with excruciating pain in the abdomen. In his own nervous language, "the pain went right to his heart." Syncope followed, and he lay as one dead; and such his friends reported him. On my arrival at eleven o'clock, A.M., he lay motionless and deadly pale. Consciousness had returned, but his breathing was imperceptible. His pulse was soft and regular. The tumor equalled in size the head of a new-born infant. It was tense to the last degree and elastic. The patient was confident the operation must be repeated, and accepted that as an alternative. After trial by taxis, sufficient to prove its utter inefficiency, I applied the tobacco, and calmly awaited restoration. In about an hour the incarcerated part was liberated; and, unassisted, swept into the cavity of the abdomen. There were no unpleasant sequelæ in either case.

All the cases reported of poisoning by this drug have resulted, so far as I have learned, from faulty methods of exhibition, or from the use of an inordinate dose. In the cases stated by Pereira,* as coming under the notice of Sir A. Cooper, Sir Charles Bell, and Dr. Copland, one drachm in clyster proved fatal in each case. Pereira also relates that a half drachm in infusion has caused death. Desault has seen a like result from an enema of the smoke of tobacco. The infusion of tobacco † is made by adding one pint of boiling water to sixty grains of tobacco, macerating for one hour and straining. The direction is: "Only one-half of the pint of the United States Pharmacopœia infusion should be employed at once; and if this should not produce relaxation in half an hour, the remainder may be injected."

Pereira says, "The cautious practitioner will not use more than fifteen or twenty grains." If he be wise, as well as cautious, he will avoid both the infusion and the smoke, employing only the leaf. This can be watched, and removed when no longer useful, and any liability to excessive action be thereby averted.—ENOS T. BLACKWELL, M.D., *Med. and Surg. Reporter.*

DIET IN ALBUMINURIA.—First in importance in the hygienic treatment of albuminuria, says Dr. Purdy in his excellent work on Bright's disease, may be ranked the diet of the albuminuric patient. It is a subject to which very much study has been given, and which requires very much more. In some observations recently made, Dr. T. Grainger Stewart, of Edinburgh, has sought to throw additional light on the question of the

* Materia Medica, loc. cit.

† United States Dispensatory (thirteenth edition).

possibility of producing albuminuria by diet in persons whose kidneys were healthy, and to the effect of various forms of diet in patients affected with albuminuria.

That slight, and sometimes marked albuminuria appears after meals is a well-known fact; the mere ingestion of food of any kind will produce albuminuria in some persons, while others are only affected by particular articles of food. The experiments of Stokvis, Lehmann, Lauder, Brunton, Power, Dobradin, Claude Bernard, and others, in regard to the causation of albuminuria by egg-albumin, are so well known as not to require more than mention here, In order to gain further information on this question Dr. Stewart selected four persons whose urine showed no albumin, even when tested with picric acid, and whose condition offered no objection to such a test.

The first patient, one with locomotor ataxia, took ten raw eggs daily, in addition to his ordinary diet for nine days. Albumin appeared in two days from the beginning of the experiment, and, while not large, was sufficient to be shown by picric acid. Twice it was shown by nitric acid, and each time an excess of the acid dissolved the coagulum, showing that it was not egg albumin, but blood albumin that was present. The albumin persisted from the day on which it appeared, but disappeared on the day on which the eggs were stopped. In the second case, one of mitral incompetence, nine eggs were given for seven days. "Albumin appeared on the first day, persisted throughout the experiment, and disappeared when the eggs were discontinued." It was distinct with picric acid, but was never shown by nitric acid. The third case, a person free from organic lesion, was given ten eggs daily for three days, in addition to his ordinary diet. Albumin was distinct with picric acid on the first and third days; on the second it was sufficient to show with nitric acid, and the opacity disappeared when an excess of acid was added. The fourth case, one of chorea, did not bear the eggs well; only three were given, and for three days only. In this case also albumin was shown by picric acid while the experiment continued. These experiments show "that the introduction of raw egg albumin into the stomach causes albuminuria; that the albumin is always in small quantity; that it disappears when the ordinary diet is resumed; and that it is not egg albumin, but serum albumin which is discharged." This kind of albuminuria, therefore, cannot be explained on the theory of the absorption of egg albumin as such into the blood, and its discharge from the kidneys; and the experiments further explode the speculation in regard to this question, of the minute size of the molecules of egg albumin and its greater transfusibility.

By way of explanation Dr. Stewart offers two suggestions: First, owing to the large amount of albumin digested and absorbed the blood becomes surcharged with this material, and some of the excess escapes by the kidneys. The second suggestion is related to some recent investigations made by Ralfe, Noël-Paton, and Oliver. Ralfe has shown the relation of functional albuminuria and hæmoglobinuria to the rate of destruction of the red corpuscles and the formation of urea. Noël-Paton has shown some of the relations existing between bile secretion and the formation of urea. Oliver has shown that urea is mainly formed from the red corpuscles and that the most active period of urea formation is when the liver is actively secreting during digestion. In the light of these observations, then, it is reasonable to suppose "that in our experiments the liver was stimulated to excessive activity owing to the excessive amount of proteids ingested, that thus the red corpuscles were more rapidly destroyed, and that the albumin liberated from them not being all transformed into urea, was in part discharged by the kidneys." This suggestion is partly confirmed by the facts observed in the test cases as to the urea discharge. In the first three cases the urea was over normal while the eggs were taken, and fell back when the eggs were discontinued.

From some experiments made on boys with cheese and walnuts, Dr. Stewart draws the general conclusion in regard to the effect of diet on the production of albuminuria in healthy persons, that while the ingestion of food has been shown frequently to produce albuminuria from idiosyncratic peculiarities, particular articles of diet induce it in some people, and while we may succeed in inducing it by the use of special articles of diet, yet the quantity of albumin is usually minute, and it has little tendency to persist after the return to ordinary food.

In regard to the question of diet in Bright's disease, Dr. Stewart made some experiments with five diets—ordinary, large, milk, low, low diet with eggs. It may be said that the compositions and weights of these forms of diet are as follows: ordinary diet 59 ounces, 15.24 parts of carbonaceous and 4.25 nitrogenous matter; large diet, 71 ounces, 19.10 parts carbonaceous and 5.68 nitrogenous; milk 60 ounces, carbonaceous 6.4, nitrogenous 3.6; low diet, 65 ounces, carbonaceous 18.98 parts, nitrogenous 2.94; low diet with eggs, 8 raw eggs, 14.5 ounces, carbonaceous 4.35, nitrogenous 5.8, and otherwise as in low diet. The points determined in each case were,—the weight of the patient; daily quantity of urine,—its specific gravity,—the amount of urea, and the amount of albumin in grammes per litre, determined by Esbach's method.

In three cases of inflammatory Bright's disease the experiments, while not sufficient to warrant general conclusions, supported the view that milk diet, or low diet is better suited to such cases than ordinary or ample diet. In a case of cirrhotic Bright's, with inflammatory superadded, the ordinary and milk diets were used for periods of six days each, but without showing any effect upon the amount of urine or urea, and the albuminuria was not diminished by the milk diet. From experiments on several cases of pure cirrhosis of the kidneys, Dr. Stewart is inclined to think that in this form of Bright's disease the diet is a less important element than it is in the tubular inflammation. He has had no opportunity of making an extensive series of experiments on cases of waxy or amyloid kidney, but so far as his evidence goes he is inclined to think that the good nourishment which is otherwise indicated in that disease, is not contra-indicated by the state of the kidneys, even though their vessels appear to be in a condition permitting of more ready transudation of albumin than is the case with healthy vessels.

The diet in the forms of albuminuria not dangerous to life may be given a short consideration. In cases of febrile albuminuria, says Dr. Stewart, the question of diet is usually of little moment, but in some, and especially in scarlet fever, there is a special liability to the occurrence of renal inflammation, and there is no doubt that a copious diet, rich in nitrogen, is very dangerous, and that something of the nature of low or milk diet is best for such fever cases, in convalescence as well as during the fever. In the dietetic and persistent varieties of functional albuminuria individual peculiarities as to food are to be studied. In accidental albuminuria diet is often of great importance. "Above all, in cases of catarrhal inflammation of the urinary tract, bland and milky diet is to be recommended. I have often seen," says Dr. Stewart, "great advantage in such cases from the adoption of an exclusively milk diet." But in some of the cases of albuminuria ordinary diet is best. Alcohol is to be avoided in all cases of Bright's disease and in cases of inflammatory accidental albuminuria, unless there be need of direct stimulation of the circulatory or nervous systems.— *Journal American Medical Association.*

RECTAL DISORDERS.—In approaching the investigation of this very interesting subject, which has been assigned to me on this occasion, it has occurred to me that the most profitable service I could render this body is a brief *résumé* of the most modern and most generally approved rational advancements that I have been able to collate since our last meeting. But before launching out into this somewhat tedious undertaking and disputed ground, perhaps it would be best to give a brief notice to the frequency and long persistence of rectal diseases.

Rectal disorders are among the most common complaints that attack civilized humanity. In gathering statistics as best we can, it is at once conceivable that ten per cent. of the human race are suffering from some rectal disease. And when we compare this with the number of cures and permanent recoveries, it is at once a fact which no one can dispute, that there is not one in fifty so fortunate; but strange, indeed, when we push our investigation further, we see that ninety-five per cent. of all operations—not including malignant disease—are permanently successful when performed by a competent surgeon. "In fact," says Allingham, "the rectum behaves better, gets well quicker, and is followed by fewer accidental complications, when operated on, than any other organ of the body."

Why are these statistics so contrasting? Echo answereth, why? Wholly owing to lack of energy, zeal, and honest endeavors to relieve suffering humanity. During the time of my limited career in the healing art, I have more than one time had patients apply to me for treatment of some rectal disease, who had been under the treatment of some other physician, whom I knew to be fully qualified to treat such disorders rationally and satisfactorily; but, from some cause, he had contented himself with administering ointments, laxatives, tonics, antispasmodics, digestives, etc., without ever taking so much as a look or introducing his finger in search of disease. Such has been the case, and such is yet going on in the ranks of our profession, that the treatment of these very curable disorders has fallen almost, if not quite, into disrepute, and places a stepping stone for the invasion of the charlatan. Hence, the cause of so small a per cent. of cures when compared with the sufferers at large. Says J. D. Smith, of Tennessee: "If all physicians who feel either too modest, busy, or incompetent to manage diseases of rectum and anus would at once turn such cases over to their more energetic and competent brothers, they would save their own reputations as physicians, be instrumental in relieving a great deal of human suffering, increase the confidence of the masses in the curative resources of the healing art, and close up one of the main avenues of quackery."

To give even a brief outline of all the advancements that have been made in the treatment of rectal diseases of late, would be far beyond my capacity, and would tax your patience past endurance, with a monotonous harangue, unedifying and inappropriate. So the harvest being so rich and great, I will content myself with not boring you with more than a passing notice of the most rational steps that I have been able to collate.

Professor Matthews, of Louisville, Ky., claims to have found in whiskey a new anæsthetic for operations on the rectum, which, if it proves to be what he claims for it, is surely a boon to modern surgery. He gives one or two ounces every twenty or thirty minutes until the patient loses all consciousness. In this condition, he says, the tenderest member of the body may be cut and mutilated without the least pain. He quotes several cases in which he has tested its efficacy in operations for piles, ulcers, fissures, and fistula in ano with the happiest results, the patients not moving or exhibiting any signs of pain whatever. Admitting it to be an efficient anæsthetic, it is not attended to supplant chloroform or ether, except where diseases of the heart or lungs, or the whims of the patient forbid the use of the latter.

Many operations have been devised of late years for the cure of fistula in ano, all of them tending to dispense with the knife—such as the actual cautery, galvano-cautery, elastic and inelastic ligatures, injections, etc., all of which have had their advocates, and been productive of much good in properly selected cases. None, however, had succeeded in supplanting the knife in all cases, until Professors Matthews and Hofmann, in the advancements of 1885-6, said that they could exclaim "Eureka!" in the treatment of that very much annoying malady. When injection, ligature or cautery is used, it leaves a gaping sinus, open at the bottom, but together at the top, thus deviating from a law in surgery, which is imperative, viz: "All fistulous sinuses must heal from the bottom;" and to obviate this difficulty, Professor Matthews has devised a plan which is well worthy of consideration.

He first ascertains whether or not there is more than one sinus (fortunately the majority of fistulæ are of this kind); he then inserts a long laminaria tent, and allows it to remain for several hours; and when it is fully dilated the tent is withdrawn, and an Otis improved urethretome, with a small point is inserted, and by the aid of the screw attachment the sinus is dilated. When this is done, the turning of the screw at the side of the instrument will cause the concealed knife to protrude according to the measurement desired. It is then withdrawn, cutting through the wall of the sinus throughout its whole length. This can be repeated as often, and in as many ways, as the operator may see fit. Hemorrhage and pain are of no consequence. Dr. Hofmann, of New York, claims to have not only succeeded in discarding the knife, cautery, ligature, clamp, and injections, but also to have set aside Professor Matthews's by a new discovery, which we are inclined to believe is the coming operation for fistula in ano of singular variety, which is, indeed, a very simple means for destroying the sanious membrane that lines fistulous sinuses. It has also been very effective in the hands of many other physicians,—always resulting in speedy recoveries, with but little discomfort or inconvenience to the patient.

In Dr. Hofmann's operation, a rubber tube is carried into the sinus, by means of a flexible silver probe with an eye, and its ends approximated. The tube will soon set up destructive irritation of the sanious membrane, and, in a few days, instead of the characteristic serous secretion, there will be a healthy purulent discharge; then already has begun the disintegration of the membrane. The first tube is left *in situ* for a few days, and is then replaced by one, say half the size of the preceding one, and so on down. They are to be changed every third or fourth day, removing the larger, and having the smaller one fastened to it, so that, as it is removed, the smaller tube will be drawn in place. This is continued until a rubber thread is introduced; then a silver wire to follow it, and the fistulous sinus is entirely cured. This method takes about twelve days, and is accompanied by no pain or inconvenience.

About 1874, M. Verneuil, of France, cured some cases of hemorrhoids by dilating the sphincters in search of other rectal trouble, and since that time it has become quite a popular remedy, though stumbled upon in the dark. The *rationale* of this treatment will be much more apparent to those of you who have read the same author's anatomy and physiology of the rectum, in which he throws much light on the modus operandi of his accidental cures. He says the superior hemorrhoidal veins perforate the walls of the rectum through what he calls *veritables boutonnieres muscularis*, which muscular button-holes, not being surrounded by any protective fibrous tissue, have the power of contracting and causing stasis and congestion in the superior hemorrhoidal veins, which constitute the *primum mobile* in the formation of internal piles. Verneuil further calls attention to the fact that these muscular button-holes are double, and at right angles to each other, the first set being formed by the circular and longitudinal fibres of the rectum. These contractile button-holes constitute, not only the passive, but also the active form of hemorrhoids. Any intestinal irritation caused by aloes, or otherwise, will produce violent and spasmodic contractions of these muscular apertures, and these contractions are communicated to the levator and sphincter ani muscles, and a rapid development of internal piles will take place. The practical outcome from the above anatomy and physiology is very important,—viz., that for the cure of the great majority of hemorrhoids nothing need be done but gentle and thorough dilatation of the sphincter muscles,—no ligature,

no cautery, no injections, no clamp, nor immediate removal need be resorted to.

This treatment is severely criticised by Allingham, but, in my opinion, falls far short of successful contradiction. While I would not be, by any means, understood to recommend forcible dilatation for every form and variety of piles, I do believe it to be the best, safest, and simplest means at our command for the relief and cure of a large majority of internal piles. Its efficacy seems to be restricted mostly to those of recent formation, to those that are aggravated by aloes, and especially to those accompanied by rigidly contracted sphincters. But in cases of long standing, where the hemorrhoids are constantly prolapsed, or when there is a loss of voluntary control over the sphincter muscles, the ligature is the remedy par excellence.

Professor M. says, after a score of years' practice in rectal surgery, that he is more and more impressed with the part played by the sphincter muscles in disease, not only in local manifestations, but also in producing obscure symptoms which oftentimes lead the physician into a false diagnosis. He recites several cases to prove his assertion, two of which are as follows:—

Case I.—Mr. G—, came to him accompanied by his physician, and the following history was elicited: About four years before he began suffering with cramps in the abdomen. No special attention was paid to this, nor were they at any time associated with any rectal trouble. Later on the patient complained of decided symptoms and an aching sensation around the arms. This sensation was not particularly referable to his stools, but was more or less vacillating as to time. Eventually pain was complained of as radiating over the sacral and lumbar regions of the spine and down the thighs. Whether imaginary or not, it was thought by the patient that his trouble was aggravated by eating, even the most digestible diet. In consequence of this, his physician imposed an abstemious diet, and upon this he was kept for years. Notwithstanding all treatment, he grew gradually worse, until his physician suspected malignant disease. During the interim, he was sent to different watering-places, and to the sea-coast, but of no avail. He began to lose flesh rapidly, and at the time he first saw him had lost about fifty pounds. A careful examination of the rectum revealed no trace of disease, except that the sphincter grasped the finger tightly upon its insertion; but the patient complained of no pain. A second examination was advised under chloroform, and, finding nothing else to do, he dilated the sphincters to their fullest capacity. The result was that ever afterwards he ate what he wanted, complained of no pain, gained flesh, and to-day (September, 1886) weighs two hundred pounds.

Case II.—Miss B— gave such a minute description of a painful dysmenorrhœa, and, believing the uneasy sensations about the rectum and anus to be reflex, she was sent to a gynæcologist. For this he had her wear a supporter, and take various medicines, the result of which was utterly futile; but she contended all the while that her trouble was in the rectum. She readily consented to take chloroform and let the surgeon do whatsoever he found to do; but, greatly to his astonishment, no disorder was found, except tightly-contracted sphincters, which were forcibly dilated, with magically favorable results. In a week she returned to her home well. In a few weeks her former physician wrote the worthy professor: "Miss B— is a changed girl; she no longer complains of anything, and is constantly on the go, when before she would not dare leave her room. What did you do?"

As corroborative evidence of the above statements being reasonable, possible, rational, and true, I eagerly contribute my mite of experience only for what you may think it worth. In April, 1886, Mrs. C— applied to me for treatment for what I diagnosed chronic gastric catarrh, with frequent attacks of enteritis and gastralgia, dyspnœa, palpitations, pains, and cramps in the abdomen, obstinate constipation, and all the other train of dyspeptic symptoms usually present in that very troublesome malady. I carried her through many courses of medicine, diet, etc., with but temporary relief, until, almost disgusted with medicines as potent agents in the cure of disease, I questioned her more closely. She confessed to me that there was one symptom in her case of which she had never informed me, and that was that defecation was accompanied by pain, and the fecal mass was often not larger than a pipe stem, and that diarrhœa was alternated with constipation.

I at once proceeded to examine the rectum digitally. No disease was found, except tightly contracted sphincters and two small internal piles. I went home and returned in a few days, finding her no better. I chloroformed her in order to explore the rectum further, in search of my long-hidden foe, but all in vain. I dilated both the internal and external sphincter to cure the hemorrhoids, and left with no small embarrassment of failure—almost weighing down my already exhausted will-power—and with the understanding that they were to let me know how she progressed. I heard no more of her for two weeks, when I saw her at church. She said all of her pains and aches were gone, and up to the time I last saw her she was in fine health; and thus she stands to-day, a cured bundle of diseases, and a living monument of rectal dilatation.—J. O. LOWRIE, M.D., *Texas Courier-Record of Medicine.*

COMMERCIAL NEWS.

Domestic Wines Used at the "Buffet Banquet" Given to the Members of the Ninth International Medical Congress.

As an expression of patriotism, and a tribute to the resources of this great country, the Reception Committee of the Ninth International Medical Congress furnished American wines to its guests. The still wines were procured from the California Vintage Company, of No. 21 Park Place, New York City, and many physicians were heard to express their gratification at the superiority of the wines, and their surprise at this country's capabilities.

A New Stethoscope on the Autophonic Principle.

Last winter Professor Da Costa, in a lecture introductory to diseases of the chest, suggested that a simple resonating apparatus might be applied to the single stethoscope, as others had attempted to apply a microphonic arrangement to the double instrument. This suggestion I laid before an instrument maker, who has succeeded in making an improvement in both the single and double instrument, which, after due and unbiased trial, we consider the best instruments in the market. The idea of applying membranes to stethoscopes for the purpose of reinforcing the sound waves, is, of course, by no means a new one.

Two features, however, are brought out in this "autophonic stethoscope" which are new. The fish-skin membrane used can be safely stretched very tight, and is not affected by damp weather; also, the membrane is arranged in such a manner as to form what we might call an autophone. A conical shaped diaphragm is inserted in the conical end of the stethoscope with an interspace between, which acts as a resonating chamber. The result of this arrangement is not only to increase somewhat the loudness of the sounds, but it also enables us to define sound better.

[*A* represents the improved gun-metal stethoscope, with ear pieces as devised by Professor Da Costa, and the protecting cap upon the opposite extremity. *B* shows the diaphragm with the fish-skin stretched over it. *C* shows the protecting cap.]

In one instance a heart murmur which was inaudible with the ordinary double stethoscope, was plainly brought out when the resonating chamber was attached. Professor Da Costa states that with the single autophonic stethoscope he has noticed that the sounds are made clear without the removal of the protecting cap.

Dr. J. C. Wilson informs me that he has "used the autophonic stethoscope with great satisfaction during his past term of service in the wards of the Philadelphia Hospital."

The part *B*, in which the improvement exists, is also made for the "University" stethoscope, and can be screwed on in place of the original hard rubber chest piece, greatly increasing the usefulness of the instrument.—R. Leaman, M.D., *Dem. of Clin. Med. Jeff. Med. Col.*

Both instruments are manufactured by E. A. Yarnall, 1020 Walnut Street, Philadelphia.

For Sale.

A country practice in northern California. No opposition. Address, Dr. H. Schafer, Igo, Shasta Co., Cal.

A Practical and Successful Mode of Disinfecting the Room in Case of Cancer.—The following letter certainly is of more than usual interest to every practicing physician:—

"From September, 1886, until March, 1887, I had in my house, and under my daily care, a case of uterine cancer. To counteract the offensive odor of this dreaded disease, I made repeated experiments with the prominent disinfectants. The following proved to be all that I could desire, viz: Three drachms of potassæ nitras dissolved in eight ounces of Platt's chlorides, full strength. In this I saturated thin muslin (cheese cloth), then dried it thoroughly. When necessary to cleanse or purify the room, I would burn small strips of the cloth on a shovel in different parts of the room and under the bedclothing. The effect was magical. Almost instantly all offensive odors disappeared. This was repeated when necessary. (The nitrate of potash was used to aid combustion.)

"The result was such that no discomfort was experienced by the attendants, and no offensive odor could be detected in the adjoining rooms. this was daily remarked by friends. The undertaker said it was the first case of death from cancer where he could detect no trace of the disease.

"This method of disinfection would be equally efficient in all contagious, pestilential or infectious diseases.

"I have presented this case at length, believing it to be of more than ordinary importance to physicians and attendants.—H. Gerould, M.D., Cleveland, Ohio."